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CLINICAL LECTURES.

INFLUENZA AND PERIMETRITIS.—SYMPTOMS OF PREGNANCY.—BEGINNING OF MENOPAUSE.—STERILITY FROM A MISCARRIAGE.

BY DANIEL T. NELSON, A. M., M. D.,

PROFESSOR OF CLINICAL GYNECOLOGY IN RUSH MEDICAL COLLEGE, CHICAGO, ILLINOIS.

Gentlemen: We have before us to-day four cases, characteristic of what you are likely to find in your offices after you have been practicing medicine for some time. The first thing you do is to find out the cause and nature of the trouble in each case; its extent, what to do, and what not to do; and the latter is sometimes most important as regards treatment, in so far as the relation of other diseases to pelvic disorders are concerned.

Influenza and Perimetritis.

Here, for instance, is a young woman who came to the clinic for the first time four years ago. She was 18 years old at puberty, and is now 28 years old and of Swedish parentage. She complains of pain in the limbs, pain in passing water, and a leucorrhœal discharge, which has increased of late; her bowels are irregular; her appetite poor; she is very nervous; she sometimes sleeps well, sometimes poorly; her menses are irregular, occurring sometimes as often as every two weeks, and are small in quantity and light in color; she has a good deal of pain at the time of menstruation. She suffers from abundant leucorrhœal discharge at present, but, she says, the discharge is usually not very large in amount, and is not constantly present.

She has been troubled also with influenza for about two weeks, having pains all over her body. We do not know what her condition was exactly at the time of the attack,

but there is no doubt but that she had the influenza. In this prevailing epidemic of influenza some patients are suffering from diarrhœa and stomach disturbance; others from constipation, loss of appetite, chills and fever, with slight alimentary disturbance; and still others from pains of a neuralgic character in the bones, muscles and limbs—with a stiffness as though they were suffering from muscular rheumatism, etc. It is not our purpose to deal so much with her last illness as the other troubles of which she complains.

A pelvic examination has been made, and no local treatment resorted to. Why? What is the condition of things found? Increased tenderness about the uterus, left perimetritis, the left ovary and tube being involved in inflammation. On making further examination with the speculum, we find a considerable leuchorrhœal discharge in the vagina. There is tenderness on the right side of the abdomen, but it is chiefly confined to the left.

What shall be done with this type of case so far as the pelvic disease is concerned? For the present we should continue to improve her general health as much as possible. In a single word, do not give much attention to the local disorders in the pelvis so long as there is a general or constitutional disease which is making considerable disturbance; so long as there is an increased temperature, considerable pain in various parts of the body, or chills and fever. The simplest local treatment has therefore been prescribed for her—hot water douches, containing borax, or some simple astringent or antiseptic. Borax, however, is likely to do as much good and as little harm as anything that can be used. The hot douches are given at night; after which she can go directly to bed and not expose herself to the changes of temperature which might aggravate the local disease. She should not expose herself after the use of these local baths. In taking any hot bath great care is required afterwards that there shall not be some acute disturbance set up by the process which we call "taking cold." She is directed to have hot applications across the abdomen if there be considerable pain. Later, stimulating applications will be of advantage, such as tincture of iodine, croton oil, cantharides, etc. If she still needs further treatment, it shall be discussed at some future time. When you have an acute disorder of a general character, such as influenza, typhoid fever, pneumonia or other acute disease, it is a good rule to let the local disease go until the general affection has subsided or nearly so.

Again, acute diseases are likely to leave an existing chronic one worse for a time. If she had been vomiting, and having diarrhœa, and if there had been considerable disturbance in the alimentary canal, the mechanical effect of the vomiting and diarrhœa in disturbing the viscera would aggravate the pelvic disease if there were no other reason for it.

Symptoms of Pregnancy.

The next patient I bring before you was 17 years old at puberty, and is now 29 years old; she is of German parentage, has been married five months and has had no miscarriage. Her present illness began four years ago. She was in the Cook County Hospital a year ago, and remained there for three months. She has headache in the morning, at about ten o'clock, which continues for several hours, and then relief comes. It comes on again in the evening at nine o'clock. She feels sick at the stomach before breakfast, and vomits. She suffers from pain in the back, chest and stomach. Her appetite is fair; she does not sleep well; she has burning pains during urination; her urine is of a darker, yellow color than it ordinarily is. While in the County Hospital she had an operation performed upon the perineum and cervix, and since that time she has been much better than before the operation, and the operation certainly was satisfactory in its results, inasmuch as both the cervix and perineum look as though they are in a normal condition. She had a child some four years ago. Her bowels are constipated, and she is obliged to be constantly using injections, or some other means, to move them; she breathes rapidly, especially after exertion, as in climbing stairs; her pulse is 100, and somewhat nervous in character. Her menses stopped eight weeks ago.

Local examination shows the uterus to be slightly enlarged, but not sufficiently so to make a positive diagnosis of pregnancy. Examination with speculum gives suspicious evidence of pregnancy, viz., a blue congested condition of the cervix. While this frequently accompanies pregnancy, it is not by any means a positive proof of it. If you have an arterial or pinkish congestion you may readily be suspicious of pregnancy. If

it is a blue or venous congestion, while it may belong to pregnancy, it may be due to other conditions, one being simply stasis, and the other a greater amount of activity, and the coloration may not be marked in some cases as in others. A fibroid tumor will produce the same venous congestion. If you know there is no tumor present and the venous congestion comes on, and it is near the menstrual period, menstruation will give you venous rather than arterial congestion. There is such a commingling of colors in pregnancy and in the approach of menstruation that you cannot always be sure whether it is the menses approaching, or whether it is pregnancy that has already commenced. In a case like this you may be reasonably certain that it is pregnancy.

On examining the breasts, we see the same evidence of congestive activity. We find them somewhat enlarged, yet they are not as large and as sensitive with increased glandular activity as is found in some cases. The sebaceous glands in the areolæ about the nipples are considerably enlarged. There seems, also, to be an unusual activity going on in the pelvic viscera. We find that the arteries are larger and are pulsating with greater force than in a normal condition of the pelvis, without pregnancy; though this of course will occur in the pelvic inflammations, in malignant diseases, fibroid tumors, and many other forms of pelvic disease. The arterial congestion to my mind is of more importance as rendering pregnancy suspicious than almost any other symptom. While the uterus is enlarged, it has not changed its form so materially as it does sometimes to make a positive diagnosis of pregnancy from its shape. With the finger passed behind the cervix, it seems to have its ordinary contour as far as the vagina can be crowded backward. Carrying the finger upward, as you go forward, there is a greater rapidity in the elevation of the walls of the uterus than usual. In other words, there seems to be an enlargement on one side (the anterior). It is not a flexion, because if so, both sides would be parallel. The uterus keeps its contour, it does not run up as rapidly as in flexion. We have the same appearance in front in the anteflexed uterus as compared with the pregnant uterus, with the ovum upon the anterior wall. If it were on the posterior wall, then you would have a reversion of this nodular appearance over the enlarged tumor-like projection. If the ovum is attached in other regions you may not get it as marked. The ovum here is implanted directly in front. I do not find the enlargement as prominent in her case as in many cases. This blue discoloration may extend also to the vagina, to the whole vulva, and to the region about the urinary meatus, and, as a rule, is much more prominent in women who have borne several children than in those that have not; or, in other words, in those who have varicose veins. Several authorities have noticed that this blue congestion about the genitals is indicative and suspicious of pregnancy, but I think that the arterial congestion is more significant than the venous congestion.

Of course, I may say in passing, that we have passed no sound into the uterus in this patient supposed to be pregnant. We have given her laxatives and told her to return from time to time that we might watch her. We advised her also to drink hot water to facilitate passing the urine freely, making it lighter in color, and therefore less irritating.

Here is perhaps an explanation of the teasing bladder: the congested uterus presses upon the bladder, and mechanically disturbs it; and perhaps not alone mechanically, for a disturbance is going on in all the pelvic organs, and this irritation or disturbance of the bladder is one of the common symptoms of the commencement of pregnancy. Under such circumstances it is best to examine the urine and see whether there is disease of the kidney, whether there is something wrong with the interior of the bladder that is causing the cystic disorder, or, what is more likely, if there is something in the uterus and adjacent organs which is teasing the bladder.

This condition demands but very little treatment in so far as the discomforts of the bladder are concerned.

For the neuralgia returning periodically at about the same time morning and evening, I would give quinine in full doses (15 to 20 grs. in twenty-four hours, in divided doses), given in the intervals of the pain, and during the pain I would give antifebrin in five-grain doses every two to three hours, for immediate relief. When there are indications for quinine, I do not hesitate to give it in full doses during pregnancy, unless it disturbs the stomach.

Beginning of Menopause.

Let me now read the history of our next patient, an elderly woman sitting on my

right, as illustrating the venous congestion that I have been talking about in the other case, though in a different way.

Mrs. J., 16 years old at puberty, now 49, of Irish birth, married 30 years, has had ten children, the oldest being 28 years of age, and youngest ten years. She had one miscarriage, eighteen years ago, occurring at the third month of pregnancy. You notice that she had her last child ten years ago, being eight years after the miscarriage, so that the bad effects, if there were any, from the miscarriage are likely to have been removed by her subsequent pregnancy. She did not have enough trouble from the miscarriage to produce sterility.

She complains of a burning pain in the womb. There is flatulency or bloating of the abdomen. She cannot sleep on account of pain in the top of the head. She has pain also in the neck and back. You notice that the complaints of patients suffering from uterine disorders of one type or another, are often accompanied by a pain in the top of the head.

The patient feels hot, never cold. Many complain of a cold spot on the top of the head or under the shoulder blade, where there is always pain. This patient, also, has a burning pain in passing water, and pain in the small of the back. Her feet swell; she is very nervous; she sleeps poorly, but her appetite is fair. She has not had her monthly sickness for four months. She has a thick, white leucorrhœal discharge, large in amount, but it has not been constant recently.

Now, what is this case? Is it one of pregnancy like the other, or not? Is the menopause approaching? Let us examine the pelvis and see what we find there. The cervix and perineum are lacerated, and the vagina is very flabby. You are not surprised at this condition of things when you know that she has borne ten children. Her largest child at birth weighed 14 pounds. Is it strange that she has a large vagina, a large vulva, a torn cervix and a lacerated perineum? That she has not suffered more than she has is strange. What do we find besides a lacerated perineum and cervix? On examination we find that both of these lacerations have fairly well healed, and it is not likely that she will need an operation to restore the parts to their normal condition.

The uterus seems to be in its place, and is growing smaller and lighter. It is not as heavy as we would expect to find it in a woman who has borne so many children. The mouth of the womb is flabby; in other words, the uterus is getting smaller, the cervix is getting thinner, the walls of the uterus are getting thinner as a result of senile atrophy. If this goes on we shall have a diminution in the menstrual flow. Some months she flows more than others. This may be due to the fact that there is not much contractile power in the muscles of the uterus so as to hold the blood, and as a result the blood-vessels are open and blood escapes rapidly from the open channels.

As to the question of pregnancy, I did not pass a sound into the uterus. I did not think it were wise to do so, though I had little suspicion of pregnancy; still the color of the two cervices, the one in the woman I told you was pregnant, and in this patient, is almost identical. The venous congestion makes the two cases almost alike, yet one does not indicate pregnancy and the other does. The fact that she has borne so many children is the reason of this venous congestion. There is an enlargement of the venous trunks in the pelvis around the uterus and in all the pelvic viscera. The patient is troubled with varicose veins in the left leg extending up the thigh into the pelvis, which probably accounts for the venous discoloration, which is so marked.

I fully believe the menopause is approaching. The irregularity of the menses is indicative of it. They have been irregular for a year. That is the ordinary way in which the menses stop: first, by a slow diminution, then becoming irregular and finally ceasing altogether.

Remember a word of caution with reference to the return of the menstrual periods. If, after they have stopped for two, three or six months, they should return with increasing severity and with a larger quantity than usual, and especially if along with the increased quantity you have an offensive odor, you should make an examination at once for malignant disease. If they simply stop for a time and return in their ordinary way, and there is no more offensive odor than formerly, it is a symptom of the menopause. When the menses stop for a time, then return again, especially if there is any odor or considerable increase in the leucorrhœal discharge, make an examination at once so as to find out whether there is malignant disease; for if there is you cannot treat it too soon. If there is to be an operation it should be done at once, as soon as the diagnosis is made.

With this case we believe we have the menopause approaching, from the lessened weight of the uterus, from the diminished menstrual flow and from the irregularity of the menstrual flow; and that the congestion is simply the venous congestion which belongs to the varicose veins in the pelvis and below, not to pregnancy, as in the other case.

Sterility from a Miscarriage.

I will now say a few words with reference to the next patient. She is of German birth, was 14 years old at puberty, and is now 26 years old. She has been married eight years, but has not borne any children; she had one miscarriage seven years ago. For the past week she has been suffering more pain in the back and head than formerly; she also suffers from nausea and vomiting each day after meals. She has been also recently complaining of diarrhœa; her appetite is poor; she complains of frequency of micturition, and has considerable pain when passing urine. Her menses are regular, but she suffers pain during the periods, and flows too much; she has a small amount of leucorrhœal discharge, but this is not constantly present; the cervix slightly lacerated; there is right perimetritis, and the left ovary and Fallopian tube are involved in the process of inflammation. She has been led to come here on account of sterility. She has been married eight years according to the history, and had a miscarriage soon after marriage. Now she suffers pain at the time of sexual intercourse; it makes her feel sick afterwards. She feels quite uncomfortable, and especially so of late. She wants treatment so that she may have children.

Why is she sterile? What condition of things is there in the pelvis to produce sterility? Surely not the lacerated cervix, for that is not sufficiently extensive to produce that. How about the perimetritis—the inflammation that is evidently about the left ovary and tube, and also affecting the tube on the right side chiefly, though the left seems to be involved in the inflammation? There is little doubt in my mind that the sterility in this case is due to the condition of the Fallopian tubes.

While we have learned little as to the cause of the miscarriage, or what accompanied that unfortunate occurrence seven years ago, I believe that if we reason in this case we will not be far from the truth: That there was at that time a septic infection or inflammation climbing up from the lacerated cervix to the uterus, and then onward into the right Fallopian tube, giving the tenderness about the ovary, and giving her a reason for the pain of which she complains during sexual intercourse. Whether there is also sufficient inflammation in the Fallopian tube on the left side to produce sterility I am not able to say, but I suspect it. The cervix is not in a very unhealthy condition, neither is the uterus. She has very little leucorrhœal discharge from the cervix, so that I believe that it is disease of the ovary and tube on the right side and the tube on the left side that has produced this sterility, and that these diseases came from septic infection, dating back to the miscarriage which occurred seven years ago.

How much can we promise her as regards the certainty of cure so far as the sterility is concerned? That, I believe, will depend largely on the success in removing the inflammation in these deep-seated parts. How shall we do it? Can we do it by galvanism? It would certainly seem from experience in many cases now that galvanism would promise as much as anything that we have at our command. By electricity applied to the interior of the uterus you may directly affect the tube and ovary; but with a comparatively healthy uterus and cervix and a healthy vagina, it does not look as though you will accomplish very much good by other local treatment applied to these organs. External applications of a stimulating character may be of some advantage; but I believe in her case that electricity is likely to be more advantageous and beneficial than any other remedy that can be applied. The galvanic current should be employed in such a manner as not to produce much pain, and that of course will depend entirely upon your experience with it. The proper strength of current necessary will depend upon your experience with this particular case. Five or even ten or more milliampères may be necessary. The electricity may be employed once a week. Twice a week is the rule, and not oftener than three times a week, the current being applied five minutes at first, then ten, fifteen, or even twenty minutes later. But be sure to use a mild current at first that shall not produce much pain. Attention should be paid to the condition of the bowels, to the appetite, and gases in the alimentary canal. Mercury in small doses—one grain—three times a day, may be given, with some simple anodyne or

astringent along with it, if necessary. Powdered salol, or the pills of salol, five grains each, may be given three or four times a day; corrosive chloride in pills of one-hundredth of a grain each may also be administered if the gases are in the stomach and returning from that region. In a word, attend to her general health, at the same time look as best you can after the local health. Promise her the best attention and skill you can command. Be careful not to promise her that you will effect a cure in a month or two, so that she will become pregnant; for sterility is one of the diseases the cure of which is exeeedingly uncertain.

In a case like this, where there is a possibility that both tubes are diseased and one ovary involved, be careful about promising to cure the sterility. Of course an operation for a permanent cure of her ailments—diarrhœa, backache, her stomach disturbance, headache, etc., by the removal of the ovaries and tubes is not to be thought of until you have given up all hope of relieving the local disease and carrying out her wish of being a mother. It may be necessary eventually to remove the ovaries or tubes, but do not think of it at present. If you can, by your skill, get the patient so well that she may become pregnant and bear children, you are likely by the wonderful changes that take place during pregnancy to have the local diseases we have pointed out in the condition of the tubes and ovaries, one or both, as the case may be, completely and satisfactorily removed by the processes attending gestation.

There is this caution: Suppose you had succeeded in having her recover sufficiently to become pregnant, and you are so fortunate or unfortunate as to attend her at confinement, remember what you know of her; that she probably had septic infection years ago; that there are likely to be still cysts or pockets in which the virus, bacilli, or infecting germs are still lodged, and which, in the processes which attend parturition, they are liable to be let loose again in the tissues. Remember, I say, her previous history and watch her with greater care, that she may not get subsequent septic infection. You may, with care, protect her from being infected from the outside. As regards infection from herself with this miscarriage, she may become infected by the remains of the disease that existed six, seven or ten years ago.

Just a word with reference to the painfulness of sexual intercourse: I fully believe, and perhaps I have expressed it once before, that it is our duty to find out whether sexual connection gives great pain or not in these cases. It is just as important for us to determine this as to know with reference to mastication whether the teeth are doing their work easily and without pain; whether or not deglutition produces a great deal of pain. It is not at all inappropriate to make such inquiries, but the information should, of course, be obtained in an appropriate way.

"PUS TUBES."—RHEUMATIC "FLAT-FOOT."—TREATMENT WITH A SILICATE OF SODA DRESSING.—SUB-ACUTE RHEUMATISM WITH MITRAL DISEASE.—DISLOCATION OF THE KIDNEY.[1]

BY MORRIS LONGSTRETH, M. D.,

VISITING PHYSICIAN TO THE PENNSYLVANIA HOSPITAL, ETC.

Pus Tubes.

Gentlemen: I have to-day some specimens to show you, which are of a character and quality which we do not often see, and which explain what is so frequently before you now, and so constantly being spoken of in these days. This stomach is evidently an alcoholic affair, very strongly so. If you will examine into the quality of its mucous membrane you will see the fibroid changes there which are characteristic of the alcoholic action. The kidneys also show alcoholic disease. The heart is hypertrophied upon the left side.

These are all interesting; but here is a specimen to which I wish especially to call your attention. It is the uterus with its appendages. This patient has evidently suffered from the incursions of gonorrhœa, although I have no history to that effect. At any rate she has had a tubal inflammation, and here is the closed up and cystic Fallopian tube, in which all of the active symptoms of inflammation have subsided, and, we might say, a cure has been effected. The tube is hermetically sealed, the ovary surrounded with inflammatory lymph, and containing a blood cyst. Menstruation has

[1] Delivered at the Pennsylvania Hospital.

been going on since the closure of the tube; and as the blood could not escape, it has emptied itself into this cyst. This specimen illustrates what I believe is the end to which all of these inflamed Fallopian tubes would come, if they were let alone. The active inflammation closes the openings of the tube, and lymph and pus are thrown out into the tube and accumulate there. When the tube becomes full, the blood supply is interfered with from the pressure within the tube, the thick product undergoes a mucoid degeneration, and a large cystic tube is produced, larger than it was when the pus was in it. In tubes like this, which have become wholly cystic, and in those in which suppuration is still going on, microscopic examination reveals that they are not pus cavities, as is claimed by some gynecologists, but that they are lined with perfectly healthy mucous membrane, lined in many cases with columnar cells. Therefore, this process is not a true suppuration. Many gynecologists remove these tubes, urging as their reason for so doing that there is great danger that the inflammation will spread from the tube and reach the peritoneum, and there light up an inflammation which will produce certain and speedy death. This would be true were the process in the tube a true suppuration; but it is not, and there is no such danger to be dreaded. Then they claim that the Fallopian tube may attach itself to the ovary and adhere, and the inflammatory process extend to that organ, producing there an abscess with a resultant peritonitis and death. This is true, but it is the rarest thing for such an accident to happen. As a rule, the tube does not become attached to the ovary, but soon closes, and the inflammatory process is retained thus, in the tube itself. In a suppurating tube which is not over-distended, we find the mucous membrane in a luxuriant state of growth. The stage which is shown in this specimen is the one to which all such cases will come if let alone. The records of this hospital for twenty years past do not show any death from the bursting of these suppurating tubes, or from peritonitis arising from this condition.

Rheumatic Flat-foot.

I have here a case of chronic rheumatism of a form which is rather unusual, and which is generally passed from the hands of one physician to those of another, and which should go into the hands of the orthopedic surgeon. The physician, as a rule, does not do much good for cases of this nature. In a great many instances we cannot do them any good; but in some we can, and I intend trying it here.

Here is a man, strong and hearty, and who has never had any particular illness. He comes to us now suffering from rheumatism in his feet. He is a worker in salt, and consequently his feet are constantly wet. He is unable to stand upon his feet, and you will notice the peculiar flat appearance of the sole of this foot. What has really happened here, is that, either owing to the prolonged exposure to the damp salt or from a true inflammation, the ligaments of the foot have softened, and, their support being removed, the foot has consequently flattened. The man is suffering with flat-foot. People suffering from such a condition have no spring to their feet, and, in fact, walk upon their heels. What I have tried to do in this case, is to build up the instep by giving it some support. As yet, he is no better than when he was admitted. I have endeavored to build up an artificial instep which will exactly fit his foot. To do this we must secure some soft material, which when placed upon a bandage will harden. This support, which I show you now, was put on yesterday about this hour, and has been allowed to harden and dry, although it is not completely hardened as yet. When I put a measure under this foot it seemed as if the centre of the foot, which should be arched, touched the ground. The instep here, you will notice, is broader than it should be, and, as I press upon it, is quite painful to the man. Pressure upon the sole is also very painful.

The support which I showed you was made by taking half a dozen lengths of bandage, cut to fit the foot, and soaking them in "soluble glass"—the silicate of soda. These are laid lengthwise upon the foot, and in this way an instep is gradually built up for the patient. This is a fair specimen of an arch which can be built up in this way. By varnishing this, to prevent the absorption of moisture, we can have a real good support for the foot. I have had to do with a great many such feet, in which the ordinary remedies will do no good; and it is only by doing this one thing that we secure a rest for the foot, and give to the patient the ability to walk. In making this sole we do not wish it to extend too far in front, nor too far back toward the heel, or

the support will come at the wrong point. Each layer is soaked in the sodium silicate and applied to the sole of the foot, and then the whole is surrounded with bandages; and in this way the pressure is made at the points where it is desirable to support the foot. Later we can have a steel made after this model, which can be placed in the shoe as a constant support. Under this treatment the ligaments regain their tenacity and resume their original condition. I will ask this man to stand up and show you how much he can do in the way of walking. There is a little spring left in the right foot, you will notice; but in the left it is almost entirely gone.

Subacute Rheumatism and Mitral Disease.

Here is a patient who comes to us with some rheumatic trouble, which is not very violent at any point. She has often had attacks before this one, and some of them were very severe. After some of these the patient has noticed a shortness of breath, especially after any considerable exertion. The present attack commenced in her elbow four weeks ago, but later shifted to her wrists and the other elbow. All became swollen, one after another. This was attended with a cough at night, some præcordial pain and shortness of breath. There was also excessive perspiration at night, which she called night-sweats, but which we know to be different from night-sweats, as that term is generally understood. Her bowels are regular; her urine is passed freely, although at times it is irritating and scalding, and darker in color than is normal. She complains of pain in her legs, and there is some swelling here, though not much, only a pitting on pressure. Her tongue was very dry on admission, and there were dry, whistling râles in the anterior upper portions of the chest. She had very little fever on admission. There was a morning rise and an evening rise after this, though the fever was not marked.

In ordinary cases of rheumatism we give the patient ten-grain doses of the salicylate of soda every hour until six doses are given, making a drachm in all. This finishes the medicine for the day. But here the woman was given fifteen grains every fourth hour, in a quantity of water, and her diet was kept low. Under this treatment her tongue became moist, and she defervesced on the following day. Now she has but little pain at any place. Her wrists are normal; as are the other joints. Her breathing is a little stuffy yet, and she has a slight cough. There is a little perspiration noticed at night, but no pain in the chest. The râles are almost all gone. Over the præcordial region, at the apex, the first sound is not clear: but it is now very difficult to hear any murmur, although when she was first admitted it was very marked. There is some excitation of the pulse, which, however, was never very rapid. Respiration has never been hurried; but there has been some depression experienced. Her lips and gums are somewhat dusky; but this is not noticed upon the fingers. She is still on a low diet; and she will be kept free from motion until this trouble is all over.

I brought this case in to speak of it in some of its relations, as suggested by the history. It is a case in which a great many joints are involved, and yet there is no great amount of rheumatism present; and in which after many occurrences of rheumatism, there comes on some cardiac troubles. There has never been any heart trouble before, and never any severe, sharp attack of endo- or peri-carditis, and, still, she has a mitral murmur. There has been enough change in the mitral valve and in the heart itself to produce a disturbance of the circulation. There is always a block in the passage of the blood from the right to the left side, whether there be a narrowing or a regurgitation, so the nature of the lesion of the valve is not necessarily important. The treatment is the same in both cases. The difficulty is increasing in this patient's case; the heart is altering in size. Its cavities are dilating, and its muscular walls are failing. Unless her nutrition is maintained, and she is shielded from fresh attacks of endocarditis, she will rapidly run down.

Dislocation of the Kidney.

Here is a very interesting, we might say mysterious, case. The patient has been in the hospital since December 2, when, being a Polish woman, she was admitted with no history. Her temperature on admission was 104°, and since then has varied, reaching at times 105°. Through an interpreter we have learned that, after lifting a heavy weight during her menstruation, she was seized with a violent pain in the back and lower portion of her abdomen. This was accompanied with difficulty in micturition and in emptying her bowels. Her tongue

was dry, black and tremulous. She had had some purgative treatment before admission, and was then having some diarrhœa. Such a history led us to believe she had typhoid fever. Later, when we succeeded in getting some urine, it was found to contain albumin. Very soon it became quite evident that she was not suffering from typhoid fever. She presented none of the characteristic symptoms of that disease. She lay in bed with her feet drawn up, to relieve the constant pain she felt in her abdomen. The abdomen was scaphoid, and with no signs of peritonitis. Her diarrhœa continued through the fourth week she was in the house. The urine she passed gradually increased in amount. Constipation followed, and the urine again decreased in amount. She now has a sub-normal temperature, which has continued for several days. When I first saw her, I got her out of bed. Her urine was then normal in character. Her bowels have been regular since. Within the last few days, without any treatment, she has commenced to pass an enormous quantity of urine. On the nineteenth of last month she passed 25 ounces; two days later, 32 ounces; two days later, 38 ounces; on the first of this month she passed 34 ounces, and on the following days, 46, 48, and 80 ounces of urine, respectively. In less than twenty-four hours she has passed 110 ounces. At one time 25 ounces of urine were emptied out of the bladder. There has been no uremic symptoms; and yet, where has she been storing up this urine? I bring the case before you as a fresh case. The patient is now in a fair state. I think that at first there was some displacement of the organs in the pelvic region, or, what I have sometimes seen, that the severe strain actually gave rise to a dislocation of the kidney. Such a thing has been known to have occurred. As a result here there has been some damming up of the fluid. We shall make an examination of her pelvic and lumbar regions to see what we can find. We shall try to ascertain the size of her kidney when passing urine and when not. Often a dislocated kidney will twist its ureter, and for the time the urine cannot escape. It is curious that a patient can retain such a large amount of urine, and where it is stored up I cannot say.

The Illinois Board of Health has just issued a new edition of its Report on Medical Education.

COMMUNICATIONS.

A HISTORY OF SPECTACLES.

BY L. WEBSTER FOX, M. D.,

OPHTHALMIC SURGEON TO THE GERMANTOWN HOSPITAL, PHILADELPHIA.

Spectacles are crutches for the eyes, said an old writer on optics; but the date at which the invention of spectacles was brought to the notice of the world is now one of the things which have been "lost in the mists of antiquity."

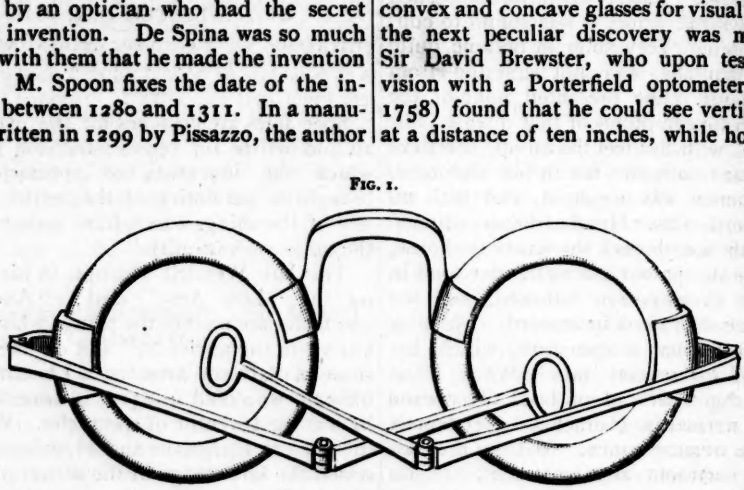
The late Wendell Phillips, in his lecture on the "Lost Arts," said: "And even spectacles are among the things which were known to the ancients;" but on the tombstone of Salvinus Armatus, a Florentine nobleman, who died in 1317, is inscribed that he was the inventor of spectacles. Whether the ancient Egyptians and Phœnicians possessed the knowledge of the action of lenses is only a matter of conjecture. The art of engraving upon glass was known 2423 years B. C., and it is impossible to recognize certain delicate lines in specimens of engraved glass which date back many centuries before Christ, without the aid of a strong convex lens. It is therefore reasonable to suppose that the artist had an aid to his vision in engraving these delicate lines. At one time glass-blowing was the chief industrial occupation of the inhabitants of Alexandria. Rome excelled in the making of glass, and in many respects this art has never been equaled. Pliny tells us that, for drinking vessels, glass was preferred to gold and silver. If the art of making glass had reached such a degree of perfection, why should not spectacles have been also made and used?

History also mentions that Nero (A. D. 68) used to view the games in the theatre from the top of the Procenium, and in the amphitheatre, through a concave glass suspended in front of him, because he was exceedingly near-sighted. Whether or not the ancients had spectacles we do not know; but it is reasonable to suppose that they had at least aids to assist their vision in the exquisite engraving found upon gems and jewels.

Our first positive knowledge of spectacles is gathered from the writings of Roger Bacon, who died in 1292. Bacon says: "This instrument (a plano-convex glass or large segment of a sphere) is useful to old men

and to those that have weak eyes; for they may see the smallest letters sufficiently magnified." Alexander de Spina, who died in 1313, had a pair of spectacles made for himself by an optician who had the secret of their invention. De Spina was so much pleased with them that he made the invention public. M. Spoon fixes the date of the invention between 1280 and 1311. In a manuscript written in 1299 by Pissazzo, the author says: "I find myself so pressed by age that I can neither read nor write without those glasses they call spectacles, lately invented, to the great advantage of poor old men when their sight grows weak." Friar Jordan, who died in Pisa in 1311, says in one of his sermons, which was published in 1305, "that it is not twenty years since the art of making spectacles was found out, and is indeed one of the best and most necessary inventions in the world."

Fig. 1.



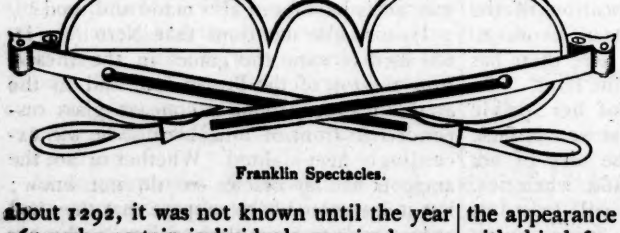
Ancient Spectacles.

Granting that spectacles were invented about 1292, it was not known until the year 1600 why certain individuals required convex and others concave glasses.

Kepler, who demonstrated in what manner the rays of light were refracted through the humors of the eye and formed a distinct picture upon the retina, also showed how the images of objects became confused and how concave glasses rendered such images clear. He further explained why it is that the brain receives an erect impression, although the image of the object is inverted upon the retina. After the application of convex and concave glasses for visual defects, the next peculiar discovery was made by Sir David Brewster, who upon testing his vision with a Porterfield optometer (about 1758) found that he could see vertical lines at a distance of ten inches, while horizontal lines were visible to him only at a distance of seven inches.

Benjamin Franklin has been credited with devising a double-focus spectacle—in what year history does not record. Franklin was born in 1706, and being hypermetropic, it is reasonable to suppose that he devised this glass about 1750. These spectacles were split glasses, the upper half to be used for distant vision, and the lower half for reading or near work. The chief objection to wearing this kind of glasses is that they cut off the lower half of the visual field in walking. (Fig. 2.)

Fig. 2.

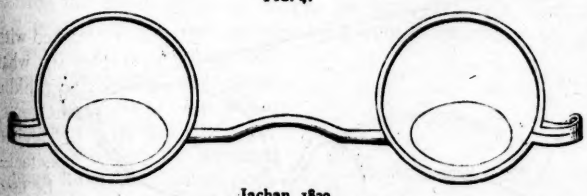


Franklin Spectacles.

Sir David Brewster was the first to discover the astigmatic eye; but the correction of this abnormality of sight was left to Mr. Airy (1825), who found that his left eye had very defective vision, so that he was unable to read with it, while the appearance of a candle-flame looked at with his left eye was not circular—as when seen with his right eye, which was also defective for distant vision—but was shaped like an ellipse, with its long diameter inclined at about 35°. The concave glass which rendered vision distinct for the right eye partly corrected the defect in the left. He concluded that the curvature of the

cornea was greater in one diameter than the other. He found, too, by drawing on paper two lines crossing each other at right angles that at a certain distance from the crossing point one line was distinct while the other was indistinct. He also found that, by bringing the paper nearer, the invisible line became clear and the formerly clear line became indistinct. From these phenomena he concluded that the refraction of one plane of his eye was different from that of the other, and, consequently spherical lenses would not benefit him. His object was then to make a glass which should refract rays more powerfully in one plane than in another plane at right angles to it. He therefore had a lens constructed which was doubly concave, one of the surfaces being spherically concave, and the other cylindrically concave, and of such a curvature as to bring to the same point the vertical and horizontal lines. An optician by the name of Fuller, at Ipswich,

FIG. 4.



Jachan, 1839.

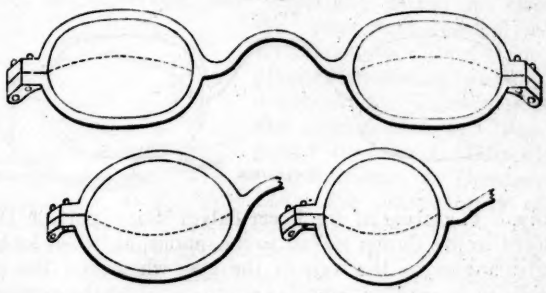
made this glass, which gave Mr. Airy useful vision in his left eye.

An improvement on the Franklin glass was made by Schnaitman, of Philadelphia, who, in 1836, was granted a patent on bifocals, which were the first ground bifocals made in this country. (Fig. 3.) The upper half was used for distant vision, the lower half for near work.

C. H. L. Jachan, of New York, in 1839, was granted a patent of a glass for spectacles, "by leaving a small, circular, clear space opposite the pupil of the eyes, to be surrounded by a ground portion, extending over the remainder of the surface so adjusted as to leave a larger proportion thereof above the eye, and in the case of concave or convex glasses that the centre of convexity or concavity shall coincide with the centre of said clear, circular space. I also claim," he says, "in combination therewith the location of the bridge and the hinges and bows to adjust the clear space to the pupil of the eye all in the manner and for the purpose above described." (Fig. 4.)

Hotchkiss and Norton, on April 17, 1849,

FIG. 3.



Schnaitman, 1836.

were granted a patent for a bifocal which was exactly like the bifocal glasses devised by Schnaitman in 1836, as show in Fig. 5, and which was no improvement over the spectacles made thirteen years before.

Samuel Gregg, of Boston, in November, 1866, was granted a patent on bifocal spectacles based on the following claims: "constructing glasses of spectacles where two distinct lenses or *segments* of lenses are contained in one glass adapted for seeing near and distant objects in such a manner that the upper edge of the convex lens adapted for seeing near objects shall be concentric with the upper edge of the lens adapted for seeing distant objects for the purpose of enlarging the field of vision." (Fig. 6.)

Edmondson, in 1867, followed with a

FIG. 5.

Hotchkiss and Norton, 1849.

more complex bifocal spectacle. The following is his description of it:

"Fig. 7a is a perspective view; Fig. 7b is a section on the line *x x* of Fig. 7a.

"Each lens consists of two pieces, of different magnifying powers, and set in different planes. The line of division between

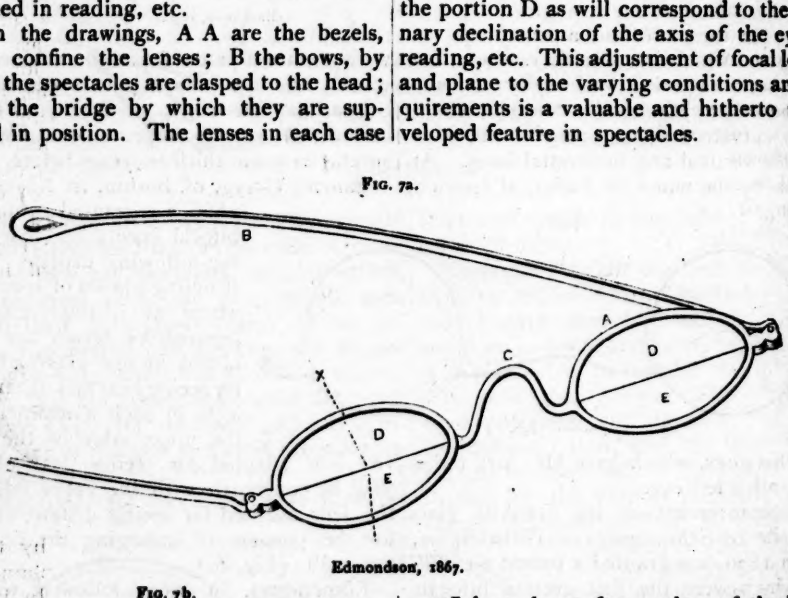
the two is the horizontal mid-section; the upper portion is of greater focal distance for viewing more distant objects. The plane of the upper portion is at right angles to that of the bows, and at about the same angle to the axis of the eyes when adjusted horizontally. The plane of the lower halves is inclined to the former so as to be about at right angles to the axis of the eyes when declined in reading, etc.

FIG. 6.

Gregg, 1866.

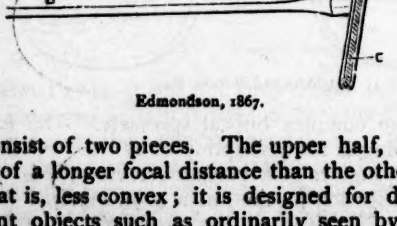
"In the drawings, A A are the bezels, which confine the lenses; B the bows, by which the spectacles are clasped to the head; and C the bridge by which they are supported in position. The lenses in each case consist of two pieces. The upper half, D, is of a longer focal distance than the other, that is, less convex; it is designed for distant objects such as ordinarily seen by a party walking, objects which are assumed to be about the height of the eye and short distances above and below. The lower half, E, is of a more convex character, so as to suit the eye for reading, writing, needlework, etc., for which purpose a stronger power is generally required, as is familiarly instanced in the case of a person reading with spectacles and looking over them at persons or other ordinary objects at a greater distance than the book. It is desired to maintain the proper relative positions of the two portions to the axis of the eyes, and to secure this the upper half is in a plane at right angles to the bows B, so that the portion D meets the requirements of the eye when looking straight forward at the scene, and the portion E is at such an angle with the portion D as will correspond to the ordinary declination of the axis of the eyes in reading, etc. This adjustment of focal length and plane to the varying conditions and requirements is a valuable and hitherto undeveloped feature in spectacles.

FIG. 7a.



Edmondson, 1867.

FIG. 7b.



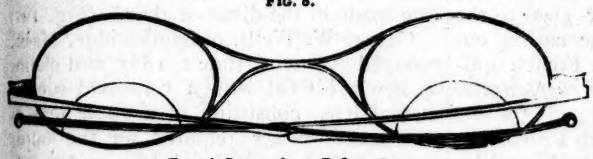
Edmondson, 1867.

"I have heretofore spoken of the invention in reference to the use of convex glasses, in which case the upper portion has the least power, but my improvement is also adapted for glasses for those troubled with myopia, in which case the upper half would be the stronger power, more concave than the lower."

I have in my possession a pair of bifocal spectacles which came from Paris in 1870, in which a *supplemental* lens was cemented on the lower third of the distant glass, and is semicircular in form. This added lens is ground exceedingly thin at its outer and upper periphery, so that in looking through it the juncture between distant and near

glass cannot be noticed by the wearer. How long these spectacles had been in use in France I have not been able to ascertain; but they were not considered a novelty when I purchased them. In fact, these spectacles are of the same style as those which have recently been so much written about and advertised in theatre programmes, as something entirely new and novel. (Fig. 8.)

FIG. 8.



French Spectacles. Before 1870.

Ira S. Doten, in May, 1877, devised and patented spectacles having separate frames from the frames of the spectacles proper, and having such frames on pivots, so that the glasses may be turned to bring the required foci into proper position for use.

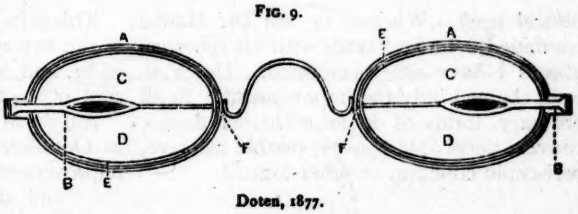
"As shown in Fig. 9, the spectacles are arranged for reading, the section D, having the strongest focus, being down. In this position the upper segment C can be used, if it is desired to look at anything above the wearer, at a distance off, without changing the positions of the foci; but when it is desired to use the spectacles for walking, the segment C must have the lowest position, as the eye naturally looks down in walking; and to attain this end all that is necessary to be done is to revolve the frame E, bringing the section C to the lowest position, when the focus will be the one required for walking.

"By this arrangement all the advantages derived from two pair of spectacles having different foci will be obtained, and the disadvantages arising from the use of spectacles having glasses with sections of different foci held stationary in the frame will be overcome, as by revolving the glasses the proper focus can be brought into position with no change in the place where worn."

Louis Franklin, in this same year, claims an improvement in spectacles, which consists in so constructing the two glasses that the upper one can be removed or folded back out of the way, so as not to obstruct the vision, or it can be folded down over the lower one, so as to form a double thickness and thereby increase its powers for reading.

In all spectacles of the bifocal pattern, cylinder glasses were not added up to this date. When it was necessary to use a stronger glass for reading, an "extra front" spectacle was universally given, or else the presbyopic correction was added to distant-vision glasses necessitating two pairs of spectacles. To overcome this inconvenience I suggested to John L. Borsch, the optician, in October, 1883, the practicability of cutting out a segment of the distant glass which had a cylinder glass added, and inserting a sphero-cylinder, which was useful in reading. By such a mechanical contrivance it is obvious that but one pair of glasses was needed for distant and near work. These spectacles, from the manner in which they were made, had their optical centres in the geometrical centres, and in consequence had not the disadvantage of a prismatic effect. (Fig. 10.) One serious objection was raised against these bifocals, and that was that, where it was necessary to give a combination of high

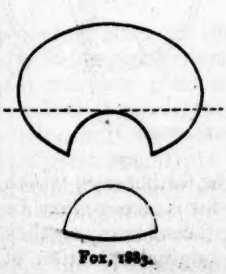
FIG. 9.



Doten, 1877.

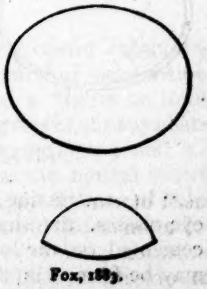
power, the curved lines formed by the double refracting surfaces at the juncture of the lenses interfered with vision. In low

FIG. 10.



Fox, 1883.

FIG. 11.



Fox, 1883.

powers, however, this was not so noticeable. The "curved line objection" was overcome

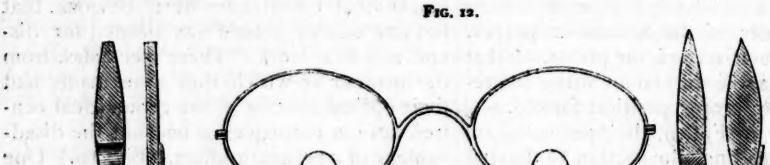
by Borsch, in making an "improved bifocal" in which the segmental lens was cemented upon the long-distance glass, grinding this supplemental lens so thin at its upper and outer periphery as to make an almost invisible line at the juncture of the two glasses. (Fig. 11.)

The only originality to which I lay claim is the adding of the cylinder glass to the sphericals. Gregg devised the cutting out of the *segmental* lens, and the French opticians the cementing on of the *supplemental* lens.

Roberts, in 1884, follows with a revolving spectacle practically the same as devised by Mr. Doten.

In October, 1884, Dr. B. M. Hanna, of Pittsburgh, received a patent for an improved bifocal lens. Whether or not Dr. Hanna combined cylinder glasses with his spherical glasses I have not ascertained. He, however, claimed only the improvement "to all ordinary forms of lenses, whether double convex, periscopic convex, double concave, periscopic concave, or other form."

FIG. 12.



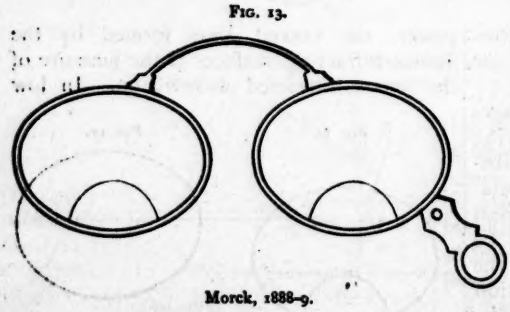
Hanna, 1884.

"In constructing," he further says, "such eye-glasses, the short-focus lenses may be cemented on the long-focus lenses, or they may be formed in the original operation of grinding, or by subsequent grinding, or the lens may be bored out and the lenses inserted with cement. I, therefore, do not confine my invention," he says, "to any particular mode of construction, as that will be best determined by the circumstances of individual taste, conditions of use, relative cost, or the fancy of the maker. Likewise the form of the lenses may vary." Dr. Hanna has only one claim to originality, and that is the insertion of the reading glass in the perforation made in the distance glass. (Fig. 12.)

George W. Wells, of Southbridge, Mass., received a patent, June 2, 1885, and claims as new a bifocal with a cemented supplemental lens, consisting of a whole lens of the weaker power required for the upper portion of the completed lens and a half lens applied to the inner face of the whole lens to give the stronger power required in the lower portion of the completed lens.

This bifocal lens is exactly the same model as the one made for me by Mr. Borsch in 1883, and was followed by Morck with a similar one five years later. (Fig. 13.)

FIG. 13.



Morck, 1888–9.

August Morck, Jr., was granted a patent in October, 1888, in "reference to certain improvements in spectacles or eye-glasses, and its object is to render more effective such spectacles or eye-glasses as are employed for combined near and far range purposes." Morck was the first to claim by patent, "in combination with spheres, *cylindrical* glasses and prisms." In describing the segmental lens which is cemented upon the long-range glasses, he uses the following language: "Is made to taper to a feather edge along the segmental line, and therefore the lens has its thickest part along the lower edge. This construction obliterates the surface-line to the sight while giving a perfectly defined area for near vision." In April, 1889, Mr. Morck received another patent on a "spectacle lens," in the construction of which he employs "two lenses of different powers of such configurations and relative sizes as to avoid the objection

of the eye resting at the same time on both lenses and the consequent blurred or dizzy effect upon the vision;" and he claims as new "the combination, with a far-vision lens, having its lower edge cut out centrally in semicircular form, of a near-vision lens shaped to fit said central semicircular opening in the far-vision lens and secured therein by suitable adhesive substance substantially as set."

To any one who has followed this article it must be obvious that Morck's first patent had already been anticipated in the glasses in use in Paris in 1870, by me in 1883 and by Dr. Hanna in 1884. His second patent was anticipated by Gregg in 1866 and by me in 1883.

Having now given a history of the development of the "bifocal" lens from Franklin's day to the present writing, I must describe a "trifocal" which was made for me by Messrs. Borsch & Rommel, January 15, 1890. The patient required *sph.* + *1. D.*, for distance; *sph.* + *3. D.*, for (piano) music; and *sph.* + *4.50. D.*, for near work. The occupation of the individual made necessary this kind of glass, which has been worn constantly up to the present with entire satisfaction. (Fig. 14.)

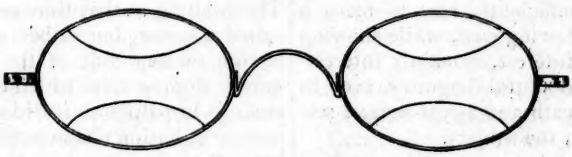
Where it is necessary, concave or convex lenses, with or without cylinders, may be made in like manner.

The base glass is the *sph.* + *3 D.*, the optical centre coinciding with the geometrical centre—understood in optics as the normal centre—and is the glass used for medium vision. The segmental lens may be ground in such a way as to preserve its prismatic effect. In other words this lens has the following equation:—*1.50 D. sph.* on one surface and—*0.50 D. sph.* combined with a prism 3°, base up, which, when cemented upon the *sph. 3. D.*, equals *sph.* + *1. D.*, optical centre coinciding with geometrical centre; being the glass used for long range. The lower, segmental lens equals on one surface *sph. 1.50 D.* on the other surface *sph. 3. D.*, with prism 3° base down; which when cemented to the *sph.* + *3. D.* (base glass) equals *sph.* + *4.50. D.*, reading glass, the optical centre coinciding with the geometrical centre of near vision. If the base glass is of a higher or lower refractive power, the figures of the segmental lenses will vary correspondingly; and it is of great importance that the optical centres coincide with the geometrical centres; which has not been so in the old bifocals and in many as made to-day.

This brief sketch—which makes no pretension to completeness—shows how true it is, that there is nothing new under the sun.

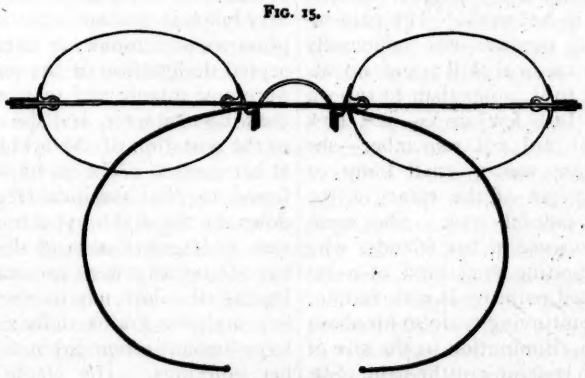
1304 Walnut Street.

Fig. 14.



Fox, 1890. (Trifocal.)

Fig. 15.



Latest Improved Spectacles.

A CASE OF ANEURISM OF THE ABDOMINAL AORTA.

BY A. HAMILTON DEEKENS, M. D.,

RESIDENT PHYSICIAN AT ST. MARY'S HOSPITAL, PHILADELPHIA.

Aneurisms of the abdominal aorta, though our statistics show a considerable number of cases, are still sufficiently rare to merit a record. The following case, while showing several points of interest, is mainly interesting owing to its doubtful diagnosis, even to the last; when death and a *post-mortem* settled all doubts on the subject.

The history in brief was as follows:

Eliza Campbell, widow, æt. 38, born in Ireland, had one child, which died. She gives the following history. Came to the United States three years ago, after the death of her husband, and has since worked out for a living. The last year of her life before entering the hospital she had worked mostly at washing clothes, and had been a healthy, strong woman all her life, with a good family history. In the early part of last February, while washing, she felt a pain in her back, on the right side, just below the shoulder blades, and thought she had sprained herself in her work. The pain remained constant, but was not sufficiently severe to call for medical skill; and no attention was paid to it, other than to rub on some liniment. In a few weeks—just how many the patient did not remember—she noticed that there was a small lump or swelling on the right of the spine in the position of the painful spot. She mentioned the fact to some of her friends, who thought she was getting some kind of a tumor, and suggested painting it with iodine, which she did, continuing to do so for about two weeks with no diminution in the size of the tumor and no lessening of the pain. She now began to feel that her general health was suffering, and went to St. Mary's Hospital Dispensary for constitutional treatment. While coming there, her principal complaint was of pains and aching in her stomach and back, while mere incidental mention was made of a lump on her back. As the laity in general have a rather hazy idea as to the exact location of the stomach, confining it to a very uncertain area with boundaries at the ensiform cartilage and pubic bones, the Dispensary Physician concluded that her main symptoms emanated from some vague uterine trouble and treated her accordingly. Her condition not improving after a short treatment at the Dispensary, she was advised to enter St. Mary's Hospital and to undergo a thorough examination; which she did, entering April 10, 1889.

Examination at the Hospital showed a large pulsating swelling on the back, situated to the right of spine and about midway between the axilla and the crest of the ilium. The swelling at that time could scarcely be called a tumor, but rather a pulsating projection on one side of the back, with very faintly sloping sides which embraced a large area. On palpation it did not give the expansile pulsation characteristic of aneurisms, but rather the to and fro or throbbing pulsation which is communicated with each heart beat. Another characteristic feature of aneurism, viz., the *bruit*, was absent, except at rare intervals, when a faint sound could be heard. Pressure did not give pain; on the contrary a strong, firmly-applied binder encompassing the whole body was one of her greatest sources of comfort to the woman. She complained about this time of sharp, shooting pains, which she compared to that of an electric battery worked inside of her. When I first attended her, about two months later, the swelling had increased very much in size and attained more the appearance of a tumor, in the commonly accepted designation of the term. The pains were now intense and more of a steady and gnawing character, and she compared them to the sensation of the nibbling of a mouse at her insides. The pains were mostly referred to the umbilical region, radiating down to the right hypochondrium. They were so intense that large doses of morphia, hypodermically, were necessary to quiet her. During the last month she took between five and six grains daily; and even that large amount often did not suffice to ease her sufferings. Her staple treatment was rest, with light diet, principally milk and broth. Her appetite left her entirely. Iodide of potassium was tried, but she refused to retain it. Simple tonics, such as quinine, gentian, etc., were given as long as her stomach would stand them. The bandage before referred to, with alcohol bathings, afforded her the greatest relief.

The *ante-mortem* diagnosis was full of doubt. Some physicians claimed it for an aneurism of uncertain location; others diagnosticated it as an internal tumor or abscess of debatable origin; and up to within a week of her death the advisability of tapping

it was suggested. Some thought it might have originated in the lung, or in the liver, from the hepatic artery. The thoracic aorta was included in these suggestions, also the abdominal aorta just below the diaphragm.

On October 5, 1889, the woman died, and on the following day I made the *post-mortem* in the presence of several physicians; and the true state of affairs was made out. It proved to be a sacculated aneurism of the abdominal aorta, commencing directly above the cœliac axis, and including an inch and a quarter in length of the aorta. It expanded into a sac which filled the greater part of right side of the abdominal cavity, and crowded the right lung into half its usual bulk. It extended two inches to the left of the spine, and below to a level with the crests of the ilia. The adhesions were so extensive and so strong that it was impossible to detach the sac from the surrounding structures. An approximate estimate of its circumference would be between thirty and thirty-five inches. It was firmly adherent to the abdominal walls, peritoneum, liver, intestines, etc. Its interior was nearly filled with organized fibrin, great masses of which I could take out with my hands, and several of which I have kept as specimens. Several of the ribs, posteriorly, had entirely disappeared. Several of the vertebræ were partly eroded, and sharp spiculæ of bone could be broken off them.

Among the symptoms complained of towards the last were a "swelling feeling in the throat," and painful pulsation in the neck on the right side. The woman's mind became visibly affected, and from being a cheerful, happy patient, she became melancholy, crying for hours at a time, thinking that she was going to be taken away from the Hospital; and no persuasions of her attendants had any effect in changing her ideas on the subject.

CONSUMPTION TREATMENT DONT'S.

BY THOMAS J. MAYS, M. D.,
PHILADELPHIA.

Don't prescribe for a chest disease until you are sure of your diagnosis.

Don't have a stereotyped prescription of cod-liver oil, hypophosphites, plenty of exercise, etc., for every case of consumption.

Don't despair of doing some good in every case; and never give a hopeless prognosis to your patient.

Don't overlook the fact that consumption is as amenable to treatment as are other chronic diseases.

Don't neglect details in treating this disease. Your success depends on your ability to control every movement of your patient.

Don't fail to realize that the pulmonary disorder is but the manifestation of a more deeply-seated disease.

Don't forget that in chronic pulmonary disease the digestive organs are of as much importance in treatment as the lungs.

Don't make up your mind to send your patient to Colorado or some other health resort as soon as you discover that he is suffering from consumption; but always bear in mind that, until he is convalescent, such an invalid is best off in a climate to which his body has, by long residence, become adapted; and that the practical results of high altitude treatment are not more favorable than those obtained nearer the sea-level.

Don't fail to perceive that bodily rest is the paramount factor in the treatment of this disease, and that next comes good nutritious food.

Don't let your patient dissipate his strength by walking or by exercising in any way; and always remember that he is on the verge of physiological bankruptcy, and that he must increase his capital stock of vitality by lessening his expenditures and by enlarging his income, or he will become insolvent.

Don't consign him to his room day and night if the weather is pleasant, and if it does not weary him to sit or lie in the open air: care being of course taken to protect him from unfriendly draughts of air.

Don't neglect to have his body well covered with woolen underclothing, which he wears day and night and changes every three or four days.

Don't let him know what the dining table has in store for him, because he always eats best when he is surprised with food.

Don't underestimate the value of the cook. The salvation of your patient is in her hands. She must be dexterous and able to render the food tempting and digestible.

Don't forget that the evening temperature of the patient must be reduced to or below 100° Fahr. before you can expect much permanent improvement.

Don't waste your own and the patient's time by giving quinine, salicylates, thallin, etc., to lower fever when you have such

serviceable antipyretics as antipyrin and phenacetin.

Don't discontinue the antipyrin or the phenacetin after the temperature is reduced, but administer them in smaller doses for the purpose of securing their excellent tonic effects.

Don't confide in antiseptic inhalations as having any influence on the phthisical process, although they are often useful in subduing a troublesome cough, and in allaying a bronchial irritation. Carbolic acid, creasote, and benzoic acid are used for this purpose.

Don't overlook the value of hot poultices applied to the chest during the day.

Don't lose sight of the fact that one grain of quinine, a quarter-grain of opium, one-grain of powdered digitalis leaves, one-sixtieth of a grain of strychnine, one five-hundredth of a grain of atropine, given in a pill four times a day, is a good tonic.

Don't forget that a consumptive who, on account of cough or other causes, cannot sleep at night never gets along well. Nitrous oxide by inhalation during the day and evening, and potassium bromide and codeia at bedtime by the mouth, often secure rest and sleep.

Don't omit to compel the patient to practice pulmonary gymnastics, both by forcing voluntary breathing, and by inhaling oxygen and nitrous oxide from a compressed air apparatus.

Don't overlook the great value of cod-liver oil when it agrees. It is best given pure, with a little lemon juice or vinegar before and after its administration. The hypophosphites must be given when the oil disagrees, or alternated with the latter.

PERISCOPE.

Intravenous Saline Injections in Diabetic Coma.

A striking case was related by Dr. Dickinson at the last meeting of the Clinical Society, and was somewhat encouraging as to the value of intravenous injection of saline fluids in cases of diabetic coma, although, unfortunately, a fatal issue eventually ensued, for after the first injection—of 106 fluid ounces—the patient regained consciousness to a very complete extent. The importance of such a respite may occasionally be very great—for instance, in the case of one who is attacked with diabetic coma without having made his will. It is something to know that by this method the coma can, temporarily at least, be made to pass away. The subsequent course of Dr. Dickinson's case is equally instructive. The patient relapsed into coma, and resort was again had to the procedure which had already proved of service. But this time the amount of saline fluid received into the circulation was actually more than the estimated average total amount of blood in the adult body. In spite of the state of plethora which so heroic a course must have produced, the patient once more regained consciousness. Dr. Dickinson's conclusions, that 100 or even 200 ounces of saline fluid may in such cases be introduced into the circulation with advantage, but that the benefit to be gained thereby can only be temporary, were doubtless justified by the experience in this case. Perhaps the same end might be obtained more rapidly if the injection were preceded by venesection, so as to secure a greater degree of dilution of the blood with a comparatively small amount of the diluent. The practice of saline injections in diabetic coma has, as Dr. S. Mackenzie remarked, been frequently employed, but in no case with permanent good results. Indeed, few patients submitted to this treatment have, as in Dr. Dickinson's case, regained consciousness even for a short time.—*Lancet*, March 8, 1890.

Operation under Hypnotism.

In the *Medical Record*, January 4, 1890, Dr. Edward L. Wood, of Minneapolis, Minn., gives the following interesting story of a very remarkable occurrence. The case occurred in the private practice of Dr. Hugo Toll, of Minneapolis, but came under the personal observation of Dr. Wood. A. S., male, aged seventeen, Scandinavian, entered the hospital September 8, with osteo-myelitis in the upper third of the humerus. There was considerable pain and swelling, some redness, partial immobility of the shoulder and elbow-joints, and three fistular openings, one directly in the axilla, one slightly above the insertion of the deltoid, and the third higher up the arm and more posteriorly situated than the last one. In the three days preceding the operation the patient was hypnotized six times by Dr. Toll, in order to get him under

good control. On the morning of September 9 he was hypnotized in his bed, and then led to the operating-room and caused to lie upon the table. The several fistulæ were then explored, scraped out, and washed out, after which an incision four inches long was made on the outer aspect of the upper third of the arm, to the bone, and an opening three inches long and three-fourths of an inch wide chiselled to the medullary canal with considerable difficulty on account of the osteosclerosis. The work was done under thorough antiseptic precautions. One fistula connected with the incision, and into the other two drainage-tubes were inserted, the recent wound was packed with iodoform gauze, and dressings were applied with great ease, as the patient, while still cataleptic, could turn from side to side, move about, or sit up, as we directed him. At 9.50 A. M. he was led to his bed, and told that at twelve o'clock he could sit up and have something to eat, the nurses, meanwhile, being cautioned not to disturb him. He lay perfectly quiet until that time, and at twelve o'clock, sharp, sat up in bed, stretched his well arm, and said, "Dr. Toll said I could have something to eat at twelve o'clock."

Amputation above the elbow would certainly not have been more painful than this operation, yet the hypnotic condition was preserved through it all, with a loss to the operator of not more than a minute and a half, all told. Dr. Wood has seen several minor operations done with the patient in a cataleptic condition, but he says—and no wonder—that this case was a revelation to him, as he thinks it will be to many of his fellow-practitioners.

Operations on the Prostate.

Dr. W. T. Belfield, 612 Opera House Building, Chicago, is engaged in collecting, for publication, cases of operation upon the prostate, particularly those for the palliation or cure of the so-called prostatic hypertrophy. He requests information concerning cases in which the operations named below, or others designed to secure the same result, have been performed. If already published, a simple reference to the periodical will enable him to secure the information; concerning unpublished cases, he would be thankful for the following items:

Date; age of patient; previous use of catheter; complications (stone, etc.); nature of operation; immediate result; subsequent history; operator (reporter).

The operations about which information is requested are:

1. Supra-pubic prostatectomy.
2. Perineal prostatotomy.
3. Mercier's or Bottini's operation.
4. Incidental removal of portions of prostate in operations for stone, etc.
5. Institution of artificial urinary channel in cases of prostatic obstruction.
6. Operations for malignant or tubercular disease of prostate or bladder.
7. Operations on seminal vesicles.
8. If supra-pubic operation, whether bladder wound was left open or sutured; whether special incision for drainage was made; to what extent bladder was distended or distensible; whether rectal bag was used; whether peritoneum was injured.

The source of information will in every instance be printed.

Nervous Affections in Whooping-Cough.

Dr. Troitski gives, in a Russian journal, a short summary of three cases of whooping-cough accompanied by mental disturbances, difficulty in or loss of speech, and loss of power, or even paralysis, of certain groups of muscles. The first case was that of a little girl two years old, who, during an attack of whooping-cough, complicated by bronchitis, was seized after some paroxysms by distortion of the eyes, blindness and contraction of the arm flexors, quiet delirium and widely-distended pupils, Cheyne-Stokes breathing, diminution of the patellar reflex and of the sense of touch and of pain. At another time she became unconscious, and there were clonic contraction of the facial muscles and staring eyes, the pupils being dilated and not insensitive to light. Soon afterwards a general eclamptic condition with Cheyne-Stokes phenomena came on, the attack lasting for an hour and a half, and giving place to stupor which lasted twelve hours, and during which the child could see, but did not understand, and called things and people by wrong names. These attacks gradually diminished, and in two months she was convalescent. The second case was that of a boy three years and a half old, who had severe headache and difficulty in thinking and speaking during the fourth

and fifth weeks of the whooping-cough, which was complicated by pneumonia. His speech returned after three months, the whooping-cough lasting eight weeks. The hearing was much impaired. The third case was that of a little girl of seven months old, who in the fifth week of her illness had two eclamptic attacks; and in the sixth week impairment of power in the right arm, the deltoid being especially affected. The arm became quite paralyzed after a fit of coughing. Dr. Troitski saw the child again after three months; the paralysis of the arm had disappeared without any treatment, the attacks of coughing having ceased when the arm became powerless. He considers that these conditions were due to disturbance of the circulation, and through that to morbid changes in some part of the brain.—*Lancet*, March 8, 1890.

Preliminary Medical Education.

The *Medical Record*, Feb. 22, 1890, in speaking of the importance of preliminary medical education, says that parents in deciding about the education of a son have to consider not only how to make him the best "medicine-man" and pill distributor, but also how to make him learned, wise, discreet, self-contained, capable of dealing practically with all kinds of people, and also of enjoying a little of the higher intellectual life. The art of medicine depends quite as much on knowing how to meet and handle men as on knowing how to prescribe drugs. The worst physicians are those whose minds from early and immature age have been steadily crammed with technical knowledge, until they see nothing except through ophthalmoscopes, or laryngoscopes, or microscopes, and hear nothing except with the ear to the chest.

Medical success is not dependent on college education nor do we mean to discourage at all those who have not been able to secure it. Some do not need it or are even injured by it. But it is a preliminary education which it is advisable always to try and obtain. And observation shows that there is an increasing desire to obtain it.

Incubation of Measles.

Dr. James A. Myrtle, of Harrogate, writing to the *British Med. Journal*, Feb. 1, 1890, says: "In a young ladies' school with thirty-five resident scholars, a case of measles occurred; the girl was at once removed to a cottage in the rear of the dwelling house, complete isolation secured, a nurse put in charge and all communication cut off. In twelve days the patient and nurse were sent away, and the cottage and everything in it thoroughly disinfected. Exactly fourteen days after this girl showed the disease, a second case occurred; fourteen days after that a third, fourteen days after that a fourth, and fourteen days after that a fifth. Nos. 1, 2, 3 and 5 belonged to different classes, and slept in different rooms; Nos. 1 and 4 were sisters, and slept together; but No. 4 showed the disease eight weeks after her sister. Each case as soon as it declared itself was removed to the hospital. The outbreak in the first instance was supposed to have been caused by infection when away from school, but that is by no means certain, as measles was prevalent in the district. Comment on these clinical records is needless."

Orthin.

Orthin is the designation of another new antipyretic, an orthohydrazin-paraoxybenzoic acid. Prof. Dr. Kobert found by experiments on animals that the muriate salt reduced the fever temperature considerably, and exerted no harmful effect. Dr. Unverricht hereupon employed the preparation in general practice, administering in doses of 4 to 8 grains, but found the effect very unreliable, and accompanied by such unpleasant side-effects that all hope of employing orthin as an antipyretic was abandoned. It was then tried for analgesic properties, and by virtue of its reducing effect in psoriasis, but no advantages could be established over other similar remedies. Both Dr. Kobert and Dr. Unverricht combine in cautioning against further use of orthin.—*Notes on New Remedies*, February, 1890.

Pasteur Institute at Buda-Pesth.

The *Deutsche Medizinal-Zeitung*, March 31, 1890, announces the proposed establishment in Buda-Pesth of a Pasteur institute—as it is convenient to call places where the method of Pasteur for prevention of hydrophobia is systematically practiced. The institute is intended also for the study of protective inoculations in general. The chief officer will be Professor Höyges.

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CHARLES W. DULLES, M.D.,
EDITOR AND PUBLISHER.

N. E. Cor. 13th and Walnut Streets,
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PRACTICAL POINTS IN THE TREATMENT OF SYPHILIS.

Almost every practitioner of medicine believes that there are at least two diseases which he knows how to treat—intermittent malarial fever and syphilis. To the first, quinine is to be given, and to the second, mercury. It is true that the remedies named are the most important curative agents in these two diseases; but it may surprise the unskilful to learn how much better results can be obtained by adapting the drug to each case, both as regards the time and the way of administering it. Dr. R. W. Taylor, who has had a very large experience in the treatment of syphilis, both in hospital and also in private practice, points out, in a communication to the *Medical News*, December 7, 1889, that most observers have for years been endeavoring so to modify and perfect the administration of mercury in syphilis that all its beneficial effects may be obtained and its deleterious results avoided. The day is long past when intelligent men think it necessary to use mercury to the point of salivation; but there are a large number who still adhere to the practice of "just touching the gums" when they are treating a patient in the early stage of secondary syphilis. Dr. Taylor holds, with many others, that it is vastly better to give it in comparatively small doses and over long periods of time, than to attempt to cure the disease by giving large doses for a few months.

As regards the abortive treatment of syphilis, either by excision or cauterization of the chancre, Dr. Taylor declares it to be an utter failure. He would abandon these operations as prophylactic measures, and employ them only when special conditions rendered them advisable. His opinion on this matter is entitled to considerable weight, for he says he has tried excision extensively over a long period of time, with painstaking attention to details, but he is convinced of its failure, even in cases apparently very suitable to it. Moreover, he is scarcely more partial to the practice advocated by Mr. Jonathan Hutchinson, *i. e.*, the administration of mercury as early as possible in the primary stage—in other words, as soon as the diagnosis of syphilis is made. Dr. Taylor thinks that when given in this stage it tends to render the course of the disease less orderly; very often leaves the existence of syphilis in doubt; does not prevent or lessen the severity of secondary symptoms, and, though it may retard them, it really often renders them more severe.

The best time to administer mercury, according to Dr. Taylor, is when secondary manifestations have appeared, when the newly-formed, young, round, infecting cells are proliferated in vast quantities and are thrown into the general circulation, and by it carried throughout the body. When this has occurred syphilis may be said to be "ripe."

At this time, and not till then, we have something to treat, and it should be treated by interrupted courses of mercury alone at first, and afterwards with iodide of potash; in preference to giving it continuously, or only when symptoms appear. Mercury may be given by the mouth; endermically, by inunctions of soaps or ointments and fumigations; and hypodermically. All these methods of administration have their advantages. In giving it by the mouth, Dr. Taylor prefers the green iodide, and next to it, the tannate. The amount which may be given to each patient varies; but tolerance is very largely dependent upon the condition of the stomach, the pharynx and of the mouth; if these can be kept in perfect order, in the vast majority of cases mercury can be given in such quantities that eradication of syphilis may result. The author is careful to insist upon the importance of keeping the mouth and gastro-intestinal tube in perfect condition, and that all sources of irritation should be prevented or removed. It is well to begin, he says, with a pill or tablet containing one-fourth or one-fifth of a grain of the green iodide of mercury, for persons of ordinary build, but to persons very large and robust, one-third or one-half a grain may be given. This dose may be taken three times a day, and then, if the symptoms do not yield (assuming that there is much constitutional reaction), if the lesions do not show signs of involution, and if the ganglia do not perceptibly subside, a fourth and even a fifth dose may be given within the twenty-four hours. The first course of mercurial treatment should last for at least three months, and, if possible, for four or five. In most cases, at the end of this time, the patient's condition will justify stopping the mercury for from one to three weeks. The next course, Dr. Taylor says, may last from two to five and a-half months, and be followed by freedom from drug taking for four weeks. The mercury may then be resumed and taken for the same length of time. During the second year he is accustomed to combine iodide of potash with the mercury, using either the bichloride or the biniodide. During this second year, all things being favorable, the intervals between the courses may be lengthened, though a full dose of the combined drugs should be given when treatment is used.

Mercurial inunctions are employed by Dr. Taylor for the erythematous and papular eruptions of secondary syphilis, and also for the enlarged lymphatic glands. He gives it as a valuable rule, never to be content with the action of mercurial pills unless there is a decidedly rapid subsidence of the glands. Unusually large, infiltrated syphilitic glands are signs of evil omen, and, as a very general rule, it may be said that they require active, local treatment. Dr. Taylor also employs inunctions in appropriate cases of early and late syphilitic meningeal and cerebral disease, in the headaches of the early and late periods, in the neuralgias of the cranial nerves and in syphilitic neuralgias in general.

In giving mercury by hypodermic injection, he prefers a solution of the bichloride in water. Treatment should be begun with a solution containing one-twelfth of a grain in each ten drops. These injections will cause the rapid subsidence of specific lymphatic swellings, and the disappearance of localized eruptions. This is an important point to remember when the eruption occupies a conspicuous position such as the face, forehead, neck or hand. Injections very often relieve promptly the headaches and various neuroses of syphilis. They afford one also a way of giving mercury successfully where, as sometimes happens, mercury given by the stomach is depressing. In eye troubles they are beneficial, and in threatening cases of grave intra-ocular trouble, the author states that marvelous results sometimes follow the regional injection of calomel. Moreover, sublimate injections are often of much benefit in osseous, bursal, fascial and articular lesions of syphilis,

especially the earlier ones. In such cases, however, it is well to administer at the same time iodide of potash in full and increasing doses.

It will be clear, from what has been said, that the modern treatment of syphilis by an expert is a great deal more than the mere routine administration of mercury by the mouth in such doses as the patient bears best. Mercury is still the sheet-anchor of the treatment; but we have learned to use it more skilfully to obtain more of its therapeutic powers and fewer of its toxic effects. Doubtless improvements in the treatment of syphilis still will be made constantly; but such great ones have been made already that the knowledge of the chief remedy employed is only the very beginning of successful treatment.

NONA.

The REPORTER, April 12, 1890, contained a news item relating to an epidemic disease, the principal feature of which was prolonged sleep, that has recently made its appearance in Germany, several cases having occurred in the province of Hesse. The disease is called nona, and at first was thought to be a new one. The victims sink into a prolonged sleep, lasting for several days, and finally terminating in death. Marked evidences of pneumonia are observed at the same time.

The peculiar character of this disease will be best understood from the history of a case, which is reported by Dr. Braun, of Bolkenhain, in the *Deutsche Medicinische Wochenschrift*, March 27, 1890. The patient, a girl fourteen years old, was suddenly seized with severe headache accompanied with high fever. Great drowsiness soon overcame the child, and she fell into a deep sleep. If aroused, she would stare vacantly about her. She did not speak, and seemed not to recognize any one, and if let alone would immediately fall asleep again. On examination the pupils were found to be dilated, and they reacted but sluggishly to the light. The color of the lips and face was decidedly cyanotic; the tongue was dry and covered with a blackish coat; the respirations were rapid, but regular; the pulse was 110 in the minute. The temperature was very high, and there was perfuse perspiration. Urine and feces were voided unconsciously. The child had a stiff neck, and if her head was moved forward she gave evidences of pain. There was no paralysis. An extensive pneumonic infiltration of the middle and lower lobes of the right lung was found. The case was clearly one of pneumonia, combined with cerebro-spinal meningitis. The presence of meningitis and the involvement of the sensory centres accounted for the absence of cough and symptoms of pain in the chest.

When the patient was seen by Dr. Braun, the pneumonic crisis had been reached, and the chest symptoms soon began to improve. The meningitis did not improve. The child's condition became more and more alarming; there was no sign of returning consciousness; convulsions became frequent; and in six days after the first appearance of the disease the child was dead.

In view of the most recent researches in the etiology of pneumonia and cerebro-spinal meningitis, the disease "nona," as illustrated in the above case, is most interesting. In nona, pneumonia and meningitis occur simultaneously. At first the meningitis symptoms are most prominent, and completely mask the pulmonary condition, until the latter is well developed. Recent bacteriological researches indicate a close connection between these two diseases; the pneumococcus having been found in cases of cerebro-spinal meningitis as well as in pneumonia.

As the number of cases of inflammation of the lungs in Germany has been very great since the recent epidemic of influenza, the theory has been advanced that the present outbreak of nona may be due to the poison of influenza. Nona cannot be regarded as a new disease; but is a combination of two

known ones. The most active treatment exerts no apparent effect upon the course of the disease, a fatal issue having occurred in all the cases reported.

PRESCRIPTION WRITING.

The trial of a case of homicide has recently been concluded in the Paris courts, after having lasted for nineteen months. The facts of the case were briefly as follows: A druggist's apprentice, in putting up a physician's prescription, dispensed hydrochlorate of morphine, instead of hydrochlorate of ammonia. A child, two and a-half years old, was given the medicine and died. The testimony of experts was brought to bear upon the case, and it was finally proved that the child died from the ingestion of nearly half a grain of morphine. It was also shown that this drug had not been prescribed by the attending physician. A verdict of guilty was therefore rendered against the apprentice and he was sentenced to fifteen days imprisonment and a fine of two hundred francs; while the druggist was ordered to pay five thousand francs damages.

Our own country is by no means exempt from similar accidents, and cases in which a druggist's misunderstanding of a physician's prescription has been followed by disastrous results occur only too frequently. A large proportion of the profession seem to make a point of writing their prescriptions as illegibly as possible. The names of drugs are frequently abbreviated almost beyond recognition, and the quantities and directions are most ambiguous. Pharmaceutical journals frequently contain puzzles, in the shape of illegible prescriptions, which often defy interpretation.

The *Journal de Médicine*, of Paris, March 16, 1890, in commenting upon the case mentioned above, suggests certain rules which it would be well for physicians in this country, as well as in France, to conscientiously adopt. They read as follows:

1. Physicians should always write their prescriptions very plainly and legibly.

2. The names and doses of all toxic drugs should be written out *in full.*

3. Full instructions regarding the exact use of the remedy should be appended to every prescription.

The pharmacist, on his part, should never put up a prescription when there is the least doubt in his mind as to its correctness or meaning; be it either the signification of a single word, or an uncertainty regarding the manner of using the preparations. In all cases of doubt, he should obtain an explicit explanation before proceeding to put up the prescription. In case of an error on the part of the physician, either through inadvertence or ignorance, the pharmacist should refuse to dispense the prescription until the mistake has been corrected. Finally, all druggists would do well never to allow their apprentices or students to put up any prescriptions containing poisonous substances.

BERKS COUNTY MEDICAL SOCIETY.

The Berks County Medical Society held its last meeting at Kutztown, Pa., April 8, 1890, where its members were entertained by Dr. J. S. Trexler, who also delivered an address of welcome. The opening address was delivered by Dr. S. L. Kurtz, of Reading. Dr. E. P. Davis, of the Jefferson Medical College, Philadelphia, read an address on "Infants' Food;" and Dr. John T. Carpenter, of Pottsville, presented a paper on the "Administration of Chloroform." In the evening the Society was entertained at a banquet. The attendance was very good, and included, besides those mentioned above, Dr. W. L. Taylor, of the University of Pennsylvania; Drs. D. J. Dunott and H. B. Beeler, of Harrisburg; Dr. Daniel N. Bertolette, of the United States Navy; Dr. W. Erdman, of Allentown; Drs. Weidman, Reeser, Ermentrout and Rhoads, of Reading, and many others.

The Berks County Medical Society have awakened to new and increased activity of late, its members being anxious for its

standard to be high, and that it should rank among the foremost medical societies of the United States. There is no doubt but their hopes will be realized, for the profession in Berks Co. contains both the talent and energy requisite for the maintenance of a successful Medical Society.

MEDICAL MATTERS IN LOUISIANA.

For some time past the *New Orleans Medical Journal* has been urging, through its editorial columns, the establishment of a Board of Medical Examiners for the State of Louisiana, and the subject will probably come up for discussion at the next meeting of the State Medical Society of Louisiana. The *New Orleans Medical Journal* advocates the establishment of one Board for the entire State, and not one for each county, as there is in Alabama. The Society will probably protest against the present obligation imposed upon physicians to pay for a license to practice.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

MASSAGE AND THE SWEDISH MOVEMENTS; THEIR APPLICATION TO VARIOUS DISEASES OF THE BODY. By KURRE W. OSTROM, Instructor in Massage and Swedish Movements in the Hospital of the University of Pennsylvania and the Philadelphia Polyclinic and College for Graduates in Medicine. Illustrated. 8vo, pp. 97. Philadelphia: P. Blakiston, Son & Co., 1890. Price, 75 cents.

This little book gives, in an admirably clear and concise way, the essential parts of massage and the Swedish movements. Mr. Ostrom follows Mezger in dividing massage into four different manipulations: Effleurage (stroking), friction, pétrissage (kneading), and tapotement (percussion). Each of these manipulations is well illustrated by a clear wood-cut. The author gives the various movements as nine in number: rotation, pressing and shaking, flexion and extension, separating and closing, bending, raising, pulling, turning, and depression and elevation. Each of these movements is briefly described. The concluding portion of the book is taken up with the application of massage and the Swedish movements to various diseases of the body.

As a whole the book can be commended as a praiseworthy attempt to give the principles and practice of massage and the Swedish movements freed from any obscuring technicalities.

THROUGH THE IVORY GATE: STUDIES IN PSYCHOLOGY AND HISTORY. By WILLIAM W. IRELAND, M. D., Edin.; Corresponding Member of the Psychiatric Society of St. Petersburg, and of the New York Medico-Legal Society, etc. 8vo, pp. vii, 311. New York: G. P. Putnam's Sons, 1889. Price, $3.00.

The author states in his preface that the present book was written in prosecution of the views given in a previous book by him—"The Blot on the Brain." He seeks to show that Swedenborg, William Blake, Louis II, of Bavaria, Guiteau, Louis Riel, Gabriel Malagrida, Theodore, of Abyssinia, and Thebaw, King of Burmah, all suffered from some mental derangement: "They were led away by delusions or uncontrollable passions from the right comprehension of things, or the right line of conduct. In figurative language, they were visited by spectres which passed through the Ivory Gate."

The most interesting part of the book, of course, is that devoted to an analysis of Swedenborg's life. Swedenborg's pretensions to supernatural knowledge, the author says, were made in the light of a most sceptical time, the latter half of the eighteenth century. They were advanced in the clearest and most matter-of-fact way, indeed with much repetition in his numerous books, in his letters, and in his recorded conversations. Either Swedenborg was subject to delusions and hallucinations, or his pretensions to commune with the dead, and his claim to announce a new revelation were really founded on truth. To admit the latter, says Mr. Ireland, would entail the admission of a new religion.

The author believes that Swedenborg inherited a neurotic tendency from his father, who was himself a spirit-seer. Illusions or hallucinations seem to have been manifested in his childhood, and even to have been encouraged by his parents. His delusions were due to auto-suggestion coming from his powerful predisposition. The doctrines propounded by him were the result of the speculations of his powerful mind working while still unsubdued by morbid influences; the spirit-seeing and attendant puerilities were the result of hallucinations and delusions formed after his nervous centres had become diseased.

The stories of Louis of Bavaria, and of Guiteau are also very interesting, especially to alienists and psychologists. Doubtless some will take exceptions to certain of Mr. Ireland's deductions, but all must allow that he has written a most entertaining book.

ASTHMA CONSIDERED SPECIALLY IN RELATION TO NASAL DISEASE. By E. SCHMIEGELOW, M. D., Consulting Physician to the Municipal Hospital and Director of the Oto-laryngological Department in the Polyclinic at Copenhagen. 8vo, pp. 90. London: H. K. Lewis, 1890.

The author first gives a brief but also very satisfactory historical review of the theories of asthma that have been held, and then presents in the same way an historical review of the reflex neuroses of the nose. He shows how the tendency, since Hack's publications, to lay chief stress upon the nasal disease in the production of asthma, has been modified gradually. In later years the opinion, he says, has by degrees gained ground that asthma is a disease of the central nervous system which may be excited to action by irritation of some peripheral nerve, as, for example, the branches of the trigeminal nerve distributed to the nasal mucous membrane. In human beings the irritable zone the irritation of which causes respiratory

reflexes, is situated in the anterior end of the inferior and middle turbinated bones and on the septum opposite and in analogous places on the posterior ends. Both zones of irritation are supplied with branches of the trigeminal nerve. The author mentions the experiments of Kratschmer, who examined these zones methodically and succeeded, by the use of irritating vapors, in provoking expiratory spasm of the muscles of respiration. The experiments were so conducted as to prove that the reflex arose from the nose alone, and that it ceased when the trigeminal nerves were cut. In explanation of the fact that no irritants of whatever kind have been able to cause asthma artificially, but only short tonic or clonic contractions of the respiratory muscles, the author suggests that the reason may be a want of predisposition in the central nervous system of the animals experimented upon. Practically, of course, this is equivalent to saying that in the absence of a sufficiently irritable condition of the "asthma centre" in the medulla oblongata the condition of the nose is powerless to provoke asthma. And this appears to be the author's opinion.

Schmiegelow's own experiences regarding the relationship between asthma and disease of the nose are represented by seventy-one cases, which are abstracted and tabulated. These cases of asthma occurred in a total of 653 of diseases of the nose. In the latter, five hundred and fourteen patients had chronic rhinitis, eight per cent. of whom had asthma; and one hundred and thirty-nine had nasal polypi, twenty-two per cent. of whom had asthma. He believes that it is possible in some cases, by suppression of the peripheral irritations, to stop definitely the asthmatic attacks; but that this in many cases first succeeds after a general strengthening treatment aimed at the central nervous complaint has been applied.

Dr. Schmiegelow has written a useful book, which throughout, as far as we can judge, is admirably moderate and just. We heartily commend it to all who are interested in asthma, especially in relation to disease of the nose.

New Remedies and Appliances.

In this department, notice will be given of Remedies, Food Articles, and Instruments or Surgical Appliances of which specimens are sent to the Editor; it will bear the same relation to these articles that the department of Book Reviews now does to books.

Wood-wool Dressings.

We have received from the Hygienic Wood Wool Co., of New York, specimens of a variety of their articles, including the wood wool, wood wool wadding, wood wool tissue, accouchement sheet, menstrual pads, and infants' diapers. In all these the most important feature is the use of finely divided wood as an absorbent material for medical, surgical and hygienic dressings. Ample experience with the material in Germany and Great Britain has shown that wood wool has very great power of absorbing liquids and that it is as safe for the physician to prescribe as it is comfortable for the physician to use. The articles sent us are well made, and abundantly deserve the attention of physicians.

Apparatus for Medication of Respiratory Passages.

Dr. J. H. Moore, of Cincinnati, sends a specimen of his patented apparatus for applying air impregnated with various medicaments to the nasal and naso-pharyngeal cavities. It consists essentially in a bulb, by means of which air is forced through a layer of liquid containing the medicament and then into the cavities to which it is intended to be applied.

The action is simple and calculated to effect the object. The box contains formulæ for use with the apparatus, but some of the ingredients could not possibly be carried out of the solutions in any quantity by the air passing through them.

Notes and Comments.

More Stringent Laws for Public Health.

In an article on the necessity of more stringent laws and stricter enforcement of existing ones for public health, in the *Boston Med. and Surg. Journal*, Feb. 20, 1890, Dr. G. H. M. Rowe says: The wave of advance that in recent years has marked every branch of medicine and surgery, has extended also to the interest of public health. The signs of the times point to better laws, a more intelligent understanding of them, and a greater willingness to accept and assist in their execution. The necessity remains of greater work and further progress. No apology is needed for renewing attention to a subject, to which much consideration has been given. It deserves thoughtful study so long as mortality from preventable causes remains at its present ratio. There has been during the last two years, much discussion by societies that meet in this room, about the various diseases communicable from person to person, and the writer judges that the interest has increased, rather than diminished.

The laws of our own State (Massachusetts) are far from perfect, but, in the main, they are very comprehensive, and if fully enforced as they now stand, would undoubtedly do much to improve the general health, and greatly reduce the death-rate from con-

tagious diseases. No better illustration can be pointed out than the result shown by our local Boards of Health in the enforcement of the laws relating to small-pox. The facts are too well known to require elaboration here as to what has been done in our own city. The laws are most scrupulously enforced on the appearance of a single case. It is taken by force if necessary, and removed not merely to a place of isolation, but to a special hospital, fully and at all times admirably equipped, not only for a single case, but for any number that may reasonably arise. The healthy are separated from the sick, vaccination enforced, the habitation and contents cleansed and fumigated, and unremitting vigilance shown to stamp out the disease at once. Too great credit cannot be given the Health Officers of Boston, for the practical banishment of what has been within twenty-five years a pestilence. During a period of twenty-eight years, more than 3,000 persons died in Massachusetts of small-pox. The yearly totals varied from twelve to as high as 300, with a yearly average of 107. During this time, similar methods were in practice as now prevail in the management of diphtheria and scarlet fever. Under the more intelligent and vigorous methods now existing, the deaths from small-pox during the last five years have been 8, 3, 1, 19 and 3; and the yearly average for the last fifteen years was only 19, or a reduction of .83 per cent. in mortality. If intelligent and efficient methods can be applied to the eradication of one contagious disease, why may they not by elaborative and vigorous enforcement, be accomplished with another, looking zealously to such diseases as have the greatest mortality, and which may be classed under the head of preventable diseases.

A comparison of the health laws of Massachusetts with those of other States shows a wide diversity. In many details they are more or less defective, and are general and insufficient. A general comparison will show that the laws of Massachusetts, New York, Illinois and Michigan lead in excellence. It might be considered a fault that the powers given under the laws are too often permissive and not obligatory. The statutes of Massachusetts make provision for local boards acting under the general supervision and co-operation of the State Board. They grant powers for such boards to carry out general and special laws for the control and suppression of contagious diseases. In a general way, they are sufficient for proper action, but from minor defects they are in too many cases inoperative. While the word "shall" is frequent, the potential "may" occurs too frequently. Many provisions are strongly and imperatively put, but in many cases there is no penalty, and hence may be ineffectual. Moreover, the capacity of the officers constituting the local boards especially in towns, is totally inadequate to carry out the powers placed in their hands. This is further made difficult not only by a want of stamina sufficient to resist social or political pressure for resistance, but by the labor and expense necessary to carry the provisions of the law to their full execution.

The laws and public sentiment concerning small-pox are well defined and adequate, but it must be conceded that there is too much indifference towards other contagious diseases, especially diphtheria and scarlet fever.

In looking at the results accomplished in England, a comparison of methods is naturally suggested, with the endeavor to find why so much more has been accomplished there than at home. Moulding public opinion, enforcement of laws, ways and means by hospitals and special appliances, cannot account for all their success. In examining English methods, the fact prominently presents itself that in cities like Glasgow, Sheffield, Manchester and Birmingham, where good results have been attained, the health officer of the town stands out as the pivotal agency. The Local Board occupies much the same relation to its community as our State Board does to our own State. The functions are general:—to note the interests of health, to make investigations as to disease or epidemics, to advise and to diffuse sanitary information. They have full power co-ordinate with any local boards or health officers, but from the vastness and diversity of the work it must reasonably come to pass that their acts are advisory and general. The local English boards occupy a similar relation to their own cities, proper allowance being made for the difference in organization between an American commonwealth and an English municipality. The English local board having decided upon the policy of action, its appointed health officer becomes the executive. The health officers of the English cities, are, I believe,

invariably medical men, since the duties of such officers are purely those requiring medical knowledge, and that of no mean order. This health officer takes the burden of the work, carries out the policy, and is left with full powers for action. Being selected by reason of his fitness, both for knowledge and executive capacity, perhaps shaping the course of action in the board itself, he is independent to push his work. The work of such officers as Drs. Gairdner or Roberts in Glasgow, shows what may be accomplished by the Executive when placed in the hands of a single-headed commission.

The success under this system naturally suggests the query whether such a policy would not accomplish better results in our own State, than the boards now constituted of three or more members. Municipal reform has for years demanded an executive head free from the constraint of two houses, always varying in complexion and policy. The brief trial given under the new charter has, I believe, received the commendation of the best citizens.

Domestic Filters for Drinking Water.

The *American Analyst*, March 20, 1890, contains an article by P. T. Austen, taken from the *Scientific American*, part of which, we think, well worth reproducing:

During the last few years the subject of water purification has received much attention, and successful methods have been introduced for filtering and purifying water on a large scale. Filtration on a small scale, while successful in many cases, comes, as a rule, under housekeeping, and the success or failure of the method will, therefore, often depend entirely on the operative ability of some domestic. While I do not wish to undervalue any of the excellent small filters now on the market, I desire to explain a simple method by which any housekeeper of average intelligence can make an inexpensive contrivance which will do its work in a way not easily surpassed by any filter that can be bought. It has been known for many years that the addition of a minute amount of alum to a water containing bicarbonate of lime in solution (and most natural waters contain more or less of this substance) will cause the formation of a gelatinous precipitate. This precipitate entangles and collects the suspended matters and germs, forming coagulated or agglomerated masses which are easily removed by simple filtration. Waters containing clay or mud which is so fine that a mechanical filter cannot remove it, when treated with a small amount of alum can be filtered perfectly clear through a coarse filter. The alum thus added is not left in the water, but is removed by the filtration, for its active constituent, the aluminic sulphate, is decomposed and precipitated by the action of the dissolved bicarbonate of lime. This should be well understood, although if a minute amount of alum were left in the water its effect would not be noticeable, and even if present in larger amounts, it would not be at all dangerous. The method of filtration is simple in the extreme. An oil bottle or any long, narrow-necked bottle serves for the filter. Tie around it a string soaked in kerosene, about half an inch from the bottom, set the string on fire, and hold the bottle bottom up. When the string is burnt out, the bottom of the bottle is thrust into cold water. If properly done, this causes the bottom of the bottle to split off evenly. The rim of the glass should now be burred off a little with a round file to remove any sharp edges that may be left. The bottle is then thoroughly cleaned and placed neck downward in a convenient support, as, for instance, through a hole bored in a shelf, or it may be allowed to stand in a wide-mouthed bottle, resting by its shoulders on the rim of the mouth. A small handful of cotton wool is now thoroughly wetted by squeezing it in water, and shreds of it are dropped into the bottle until a layer of about two inches deep has been made. The shreds should be dropped in carefully, so as to distribute them evenly, and not to let them pile up in the middle or at the sides. When enough cotton has been dropped in, a cup or two of water is poured in and the bottle gently tapped. This consolidates the mass and finishes the making of the filter-bed. The amount of alum needed to coagulate the water sufficiently for filtering need not, as a rule, exceed two grains to the gallon, and in many instances may be less, but in certain cases of very dirty waters, such as that of the Mississippi River, the amount of alum may be increased to four or even six grains per gallon. The alum is best kept in a solution of such a strength that a teaspoonful of it will contain a grain. To save trouble, the following prescription will enable one to get enough of the solution put up at any apothecary's to last for a considerable time:

℞ Alum . . . . . 128 grs.
Distilled water . . . . . one pint.

I may add that the expense of this prescription, including the bottle, should not exceed fifteen cents.

The treatment and filtration of the water is best done as follows: A gallon of water is placed in a clean tin pail and two teaspoonfuls of the alum solution are added. It will save time to make, once for all, scratches on the inside of the pail, showing the height of one, two or more gallons of water. It is then well stirred with a clean tin dipper. It is best to keep this pail and dipper for this use alone. They should be kept scrupulously clean and frequently well scoured with sapolio or a similar kind of soap. After mixing, the water is allowed to stand five or ten minutes, and then poured, by means of the dipper, into the filter. It will run through rapidly if the filter-bed has been properly made, and will be as clear as crystal, and not seldom will form an astonishing contrast with the original water. The first half-pint of the water passing through should be rejected. The filtered water may be caught in a pitcher or in any other convenient receptacle. A filter-bed will last a day, but it is not advisable to use it longer. Each day the used filter-bed should be thrown away and a fresh one prepared. The method may, of course, be applied to any of the many filters in use, simply adding to the water to be filtered one or two grains of alum to the gallon. It will be a poor filter, indeed, that will not filter clear after this addition. Of late, attention has been drawn to the latent dangers in ice. It has been found that this apparently harmless and attractive substance may fairly reek with disease germs and filth of all kinds. Unless it is known from whence the ice comes, its use may be more dangerous than the use of water. Ice is sometimes derived from water which no one would think of drinking, as, for instance, from ponds in cemeteries and from rivers in the neighborhood of sewer outlets, and as a result may be indescribably foul. Aside from the danger of germs lurking in ice, there is risk in the indiscreet use of water cooled to an abnormally low temperature, since functional disorders are often caused by the drinking of very cold water. No water is so refreshing as a mountain spring, and one reason of this is that its temperature is just right. It is well to take hints that are given by nature, and the hint that the best temperature of drinking water is about fifty degrees Fahrenheit is a good one, and worth following.

Diagnostic Value of Tolerance of Iodides in Syphilis.

In *L'Union Médicale* for October 31 and November 2, 1889, is to be found an article by Dr. J. William White on the diagnostic value of the tolerance of iodides in syphilis. The paper is a translation and amplification of one on the same subject published by him in this country some months ago. It was read at the French Congress of Dermatologists and Syphilographers held in Paris last August. The assertion of Dr. White, that the presence or absence of iodism is of no diagnostic value in these cases of suspected syphilis in which large doses of iodides are given tentatively seems to have met with the very general endorsement of the profession, including not only the venereal and genito-urinary specialists, to whom Dr. White's paper was more particularly addressed, but also the neurologists and general practitioners. There has undoubtedly been a more or less widespread belief that tolerance of the iodides indicated the existence of syphilis, and if, as it would seem to be the case, this is incorrect, Dr. White has rendered a valuable service to the profession in calling attention to the subject. His position is strongly supported by such men as McCall Anderson, Hyde, Keyes, Otis, Sturgis and others, and would appear to be consistent with both theory and clinical facts.—*University Medical Magazine*, Jan., 1890.

Sanitary Convention.

The fourth State Sanitary Convention of Pennsylvania will be held at Norristown, Pa., May 9 and 10, 1890, under the auspices of the State Board of Health, acting in conjunction with the Board of Health of Norristown.

It is intended that the essays and discussions shall be entirely of a practical and popular character. The object of the Convention will not be scientific research, but the unfolding of the results of such research with clearness and simplicity. It is especially desired that women, on whom so much of the hygiene of the home depends, shall attend. The occasion will be one of especial interest and profit to health officers and municipal authorities, who, it is trusted, will avail themselves of the opportunity.

NEWS.

—Dr. William R. Wilmer, formerly Naval Officer of the Port of Baltimore, died April 25.

—There were nine cases of measles among the immigrants at the Barge Office in New York, April 26. They were all imported on the steamer Teutonic.

—Dr. David Gilbert Adler, a graduate of the Jefferson Medical College in 1889, died in Philadelphia, April 22, at the residence of his father, Dr. John M. Adler.

—The funeral of Mrs. Keziah Halstead, aged 63, a nurse in a number of Southern hospitals during the rebellion, and widow of Dr. Joseph Halstead, of Chicago, took place April 23, at Oceanic, N. J.

—The movement for the establishment of a special training school for nurses in the insane department of the Philadelphia Hospital has taken practical shape, and the school will probably open early in this month.

—A dinner was given at the Hall of the College of Physicians of Philadelphia, April 22, the occasion being the presentation to the college of life-size portraits of Dr. D. Hayes Agnew and Dr. S. Weir Mitchell.

—The twenty-seventh annual commencement of the New York Medical College for Women took place April 22. Following the Dean's address came the administration of the Hippocratic oath to fifteen graduates.

—Dr. Nicholas Senn and Dr. Christian Fenger have been elected regular Professors of Surgery in the Chicago Polyclinic. In addition to clinical work, they will present a special course in abdominal surgery twice yearly.

—Dr. R. S. Marshall, a prominent physician of Pittsburgh, Pa., a graduate of Bellevue Hospital Medical College, in 1874, committed suicide, April 22, by shooting himself in the head. Illness is given by his family as the cause.

—The Ladies' Aid Society of the Building Fund Committee of the Philadelphia Polyclinic and College for Graduates in Medicine gave an afternoon tea, April 22, in the Hotel Stratford, to raise funds for the completion of its new hospital building.

—An epidemic of typhoid fever is said to have broken out in Augustana College, at Rock Island, Illinois. One student has died, and many others and a professor are dangerously ill. Defective sewerage in the main building is said to be the cause, and it is being remedied as quickly as possible.

—The resignation of Professor George W. Miltenberger was accepted April 25 by the faculty of the University of Maryland. He was then unanimously elected Emeritus Professor of Obstetrics and Honorary President of the University. Dr. Miltenberger has been connected with the University of Maryland for fifty years.

—Malignant diphtheria is said to have been recently epidemic in the village of Vining, Minn., which has a population of about 150 persons, nine-tenths of whom were afflicted with the disease. There were twenty deaths between April 1 and April 23, and thirty altogether. The funerals of all the victims have been public and largely attended.

—The Board of Health of Philadelphia, on April 22, directed its Chief Milk Inspector to prosecute seven dealers who were alleged to have continued to sell diluted, skimmed and colored milk in violation of the Act of Assembly, after having been notified of the same. It was resolved to ask City Councils to pass an ordinance to prohibit the sale of adulterated or impure milk.

—The health of Constantinople has, for many months past, been below its average standard. The sanitary appliances introduced in the construction of the houses appear to be deplorably imperfect, and their wretched arrangements are not assisted by an efficient supply of water. As regards external drainage, Constantinople is finely situated, but there are many quarters where the gradient of the sewers is too slight to ensure a rapid outflow.

—The Charity Hospital, of Norristown, Pa., some time ago adopted a provision that the medical staff of the Hospital should be selected from the Montgomery County Medical Society. Subsequently the Hospital Association was appealed to in a petition to rescind the rule so as to admit homœopathic physicians. The matter was formally discussed and attracted general local attention. A committee to which the petition was referred presented a report at a meeting of the Association, April 17, in which they say they are forced to believe that two schools of medicine in a public hospital is impracticable; that it would lead to endless conflict and confusion. They, therefore, declined to recommend any change of rules of the institution, thus debarring homœopaths from practicing there.